

PERSPECTIVES OF EDUCATORS ENGAGED IN CONTINUOUS IMPROVEMENT
EFFORTS WITHIN A RURAL APPALACHIAN SCHOOL SETTING

A Dissertation
by
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Abstract

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Current research about change and/or continuous improvement in rural school districts is somewhat limited, with the bulk of empirical exploration being products of the 1980s and 1990s. For a variety of reasons, most educational studies are discussed from urban, statewide, or international perspectives. Few empirical studies are focused on the particulars of the rural experience. This case study contributes to an examination of how improvement efforts can be effectively managed within a rural district that is isolated geographically and that lacks cultural and economic resources.

This research study serves as an analysis of how educators in a rural Appalachian school district respond to change resulting from federal and state mandates for curriculum reform and initiatives secured through grant funding. This study examines how educators engage in the change process as they work to improve the educational experiences of children.

Case study research was chosen as the methodology for this study in order to provide an intensive examination of a particular case specific to rural Appalachia. The research protocol included an on-line survey, interviews, and documentation review. The data from each of these data sources were analyzed using the principles of grounded theory and were viewed through the lens of the Concerns Based Adoption Model. From the review of the data, four themes became evident: management, impact, collaboration, and culture.

The findings of this study provide evidence that systemic educational improvement can be effectively implemented in rural school districts; however, particular attention should be given to factors related to the culture of not only the schools, but also the community at large. The themes of management, collaboration, impact, and culture emerged within the framework of the Concerns Based Adoption Model and are supported by educational literature, yet the cultural element should be added to the Concerns Based Adoption Model if utilized for planning for systemic change. This study illuminates the importance of examining the cultural climate and institutional memories of any district prior to beginning any improvement activity as this may allow the culture of a district to inform the work of those leaders engaging in improvement efforts. The study suggests that occasions for open dialogue about experiences within the district as well as opportunities for more authentic social interactions among educators can enhance rather than undermine the improvement pursued by the district.

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I have had the distinct pleasure to work with a wonderful committee who has truly wanted me to succeed as much as I did. I cannot express the deep gratitude that I feel for my dissertation co-chairs, Dr. Kathleen Lynch-Davis and Dr. Tracie M. Salinas. Their deep understanding of education within the Appalachian culture has been an unexpected gift that has allowed me to put experiences into words and words into meaning. Along with Dr. Roma Angel and Dr. Bob Heath, I value the relationships built with each committee member throughout this process. You each have been an inspiration to me.

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My husband, Larry, has been a solid source of encouragement and has walked each step of the doctoral journey beside me. He has cherished the rural Appalachian experiences as much as I have and made his own imprint in a region that he also holds dear. Throughout my educational career, Larry has never complained about picking up extra duties, tuition payments or the reams of paper stacked throughout our home. He has listened to my frustrations with compassion and my successes with joy. My love for him is unending. I cannot imagine making this journey with anyone else.

My two children, David and John, have been both a delight and an inspiration. We have completed homework beside of each of other. John has kept me laughing when I was the most frustrated. David, without knowing, has continually reminded me to believe in myself even when it is hard. Neither David nor John has complained when I read articles at their ballgames or worked on a draft around a campfire. Both boys have learned to be independent and hopefully, lifelong learners.

Finally, when I walk across the stage at graduation, many people will walk in spirit with me. My late foster mother and natural parents will be with me. All of my other “parents” and the community of Lewisburg, WV (my hometown) will be there knowing that their investment in me has paid off. Bob Slaven will be there saying, “I was the first to say you would be a doctor!” Uncle Joe will be there with a proud smile on his face. I will hear him say, “The journey is not finished.” If I look closely, I will see that he is holding a pair of red keds in his hands.

Dedication

This work is dedicated to each of the educators in the rural Appalachian district where I attended school and the district where I have spent my career. Your work is valued and does make a difference. “*Sic jurat transcendere monte.*”

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Chapter One: Introduction

When I was a very young child, I was placed in foster care. I was the youngest of ten surviving children born to my parents. Both parents were limited cognitively. My natural father worked sporadically as a scab miner and ran a bootleg still in the “hollers” of West Virginia. My parents were simply unable to keep our family intact. After moving through a variety of foster homes, two brothers and I came to live in our longest foster care placement when I was four years old. I was able to remain in this placement until I reached the age of 18. This foster home placement was due to the intervention of one man – Uncle Joe. I thrived in this home with the assistance of people in my community, a judge who would bring his daughter’s hand-me-downs to court, a church family, and, most importantly, my school system. I was fortunate to be educated by a series of teachers who would not let me settle into the stereotypical expectations for a girl growing up on the “wrong side of the tracks” in rural Appalachia.

My most vivid childhood memory is of a pair of red Ked tennis shoes that the judge who handled my case gave to me. I absolutely adored those shoes. They were both comfortable and comforting. A moment of crisis occurred when my new family moved to a larger town. Uncle Joe was moving us and somehow one of the red shoes fell out of the car and never arrived at our new home. I was heartbroken. My foster mother tried to assure me that everything would be fine. There would be a replacement for what was lost. I was going to outgrow the shoes anyway. However, I would have none of it. Uncle Joe went back up and down the twelve-mile mountain route looking for the shoe. Two days later, after I had

actually given up throwing my temper fit, Uncle Joe found the shoe lying beside of the road. By this time, I had become accustomed to a new pair of shoes. The red pair of Ked tennis shoes no longer enthralled me. I was willing to give up something that I was comfortable with for something that was better.

I must have thrown quite the temper fit over the red shoe because it became notorious in my family lore. Uncle Joe and I bonded over the story and recounted it many times before his passing. As he and I built a relationship together, I learned much of what I now believe about “being rural” and how things occur. I learned how a community can work together to make a marked difference in the lives of people.

Uncle Joe, who was actually the stepson of my new foster mother, ran away from home at the age of 16. He never graduated from high school but was not content to live within the stereotype of a high school drop out from the slag heaps of southern West Virginia. Uncle Joe worked hard to make his life better and ended up working for the Civil Aeronautics Space Administration which was the parent organization of the National Aeronautics and Space Administration (NASA). Uncle Joe was a self-taught man and retired as a quality control officer from NASA itself. Through his stories, I learned of a man who raised himself from his bootstraps, was never content with the status quo, and was not willing to let others in power limit the success of the less fortunate. He was a constant advocate for what he called the little man. He would not let others write off his friends and neighbors as being from the hollers, being unintelligent, or being easy marks. Uncle Joe recognized how to work within a variety of environments and saw how to leverage resources to get the desired effect. Uncle Joe knew innately that there would be times of crisis. He also knew that in coming together with those who were important in our lives, things would get better.

Uncle Joe made sure that I knew what he expected of me, and I was certainly more than willing to comply especially for a man that spent days looking for one red shoe.

Relevance

The following case study attempts to capture the perspectives of educators who are as dedicated as Uncle Joe in meeting the needs of youth within a rural mountain school district. This descriptive case study is designed to provide meaningful insight into the experiences of educators who are responsible for transforming the educational opportunities available to students in rural districts. While the setting of this case study is specific to rural Appalachia, the insight gleaned can inform the practice of those working in similar districts. The qualitative data collected provides a rich description of the personal experiences of these educators. The analysis presents the viewpoints of teachers and educational leaders who strive to continually improve educational outcomes for students who are isolated geographically and are constrained by high levels of poverty and low levels of economic development.

My interest in this research topic arose from my own experiences as an educational leader, parent, and community member within the district that is represented. I am currently employed as the Director of Student Services for Alleghany County Schools, and while in this position I have been part of the leadership team responsible for implementing many of the reforms presented within this study. Williams and Nierengarten (2011) describe the challenges associated with this role by stating:

Administrators in America's rural school districts are uniquely challenged to meet increased achievement expectations despite decreasing resources. A combination of

mandated reform initiatives, population decline, and the complex formulas used to distribute tax-based funding have disproportionately affected rural schools. (p.15)

I have learned that state and national leaders can easily overlook small, rural areas. Educational leaders can limit possibilities by accepting life within the cultural stereotypes of rural, Appalachian communities. Success can also be limited in school districts where educational leaders become overwhelmed by geographic isolationism, lack of fiscal resources, and rural culture. One can further limit one's own success by holding onto what is comfortable and known rather than exchanging it for what could be. Uncle Joe taught me that things could be better. He showed me that with enough determination, will, and desire, an individual could make a difference. Possibilities abound if one simply refuses to accept the limits presented by obstacles. Uncle Joe taught me to find creative ways to work around the mountains that existed. He taught me to keep moving forward. He taught me to expect more.

Statement of the Problem

This research study serves as an analysis of how educators in a rural Appalachian school district respond to change resulting from federal and state mandates for curriculum reform and instructional initiatives secured through grant funding. This study examines how educators engage in the change process as they work to improve the educational experiences of children.

This case study examines the perspectives of educators employed by Alleghany County Schools which is a rural school district located in the northwest mountains of North Carolina. The educators within the school district have been engaged in a process of continuous systemic improvement for the past seven years. This period of improvement

began with the selection of a new superintendent and a restructuring of the central office leadership team for the district. At this point in time, school based leadership also changed, with principals in each school being replaced within a period of one and a half years. While many aspects of this improvement process have developed out of the creativity of educators within the system, other aspects have been required by Race to the Top or other mandates by federal and state governments.

In 1532, Machiavelli wrote, “There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things” (Skinner and Price, 1988, p. 21). The human or personal element of this introduction of a new order is perhaps the most challenging to manage. For some teachers, mandated changes, processes of continuous improvement or reform can create a perception “that [it] is something being done to them rather than as a supportive strategy for improving education” (Blalock, 2007, p. 46). These perceptions can breed defensiveness, insecurity, and skepticism, thereby making the introduction of a new instructional order all the more perilous.

A recently completed pilot project showed that teachers within the district have experienced a variety of emotions as they move through reform initiatives generated at the federal, state, and local level. This pilot project used observations accompanied by in-depth interviews to glean teacher reactions to educational change experiences within the district. Teachers described the onset of the Common Core curriculum change as a major incident of turbulence, with some reports of frustration. The results of the pilot project warrant further investigation in order to capture a deeper description and analysis of the experiences of this

rural Appalachian district. Further examination provides opportunities for similar districts to learn from the collective experiences of educators within Alleghany County.

This case study examines the experiences of educators within Alleghany County Schools who are striving to meet the educational needs of the students and community they serve. This study captures the perceptions of rural Appalachian educators engaged in the process of continuous systemic improvement outlined by district, state, and federal initiatives.

Research Questions

As Rizzo (2012) stated in remarks made to doctoral students, “Change is inevitable and continuous improvement is desired - as opposed to a sequence of serial beginnings.” If efforts are to be successful, recognition of the critical elements of continuous improvement is necessary (Elmore, 1998; Fullan, 2008). There exists a vast array of research on organizational change as well as research on specific innovations within an organization. One can find a wide variety of literature on change and innovation in urban and international settings; however, there is little empirical research or literature on the dynamics of school improvement within a rural setting.

Regardless of the effort proposed and the stage upon which it is to occur, the impact of the endeavor is directly related to the knowledge of the stakeholders involved. If any improvement effort is to be effective, those in positions of authority should know and understand the processes of change as it relates to continuous systemic improvement and have an adequate plan to address the needed structures of success. Leaders within rural educational settings should know and understand the dynamics involved in any improvement

effort as it occurs within rural cultures if their endeavors are to be successful and sustainable (Bana, 2010; Jerald, 2005; Seashore, 2009).

In comments made at the Scaling STEM national conference, Dr. Sam Houston stated, “You can reform all day long until it affects the life of an adult” (2012). This personal element of improvement efforts often goes unnoticed. The personal investment in continuous improvement efforts seen within a rural culture can be much different from that seen in an urban setting. A thorough examination of how the rural educators identified for this study have managed the improvement process incorporates a variety of components instrumental in change processes. These components include an awareness of the improvement efforts, personal concerns, questions of the ability to manage the activities, the perceived impact of the proposed activities, and the determination of how opportunities for collaboration will be provided. This particular study identifies specific reactions to the initiatives proposed. The research examines factors identified by the participants as those that enhance as well as those that inhibit acceptance of new ideas. This research study provides a detailed description of the experiences of those rural educators involved in the process of continuous systemic improvement. It is within that framework that this research is conducted and the following research question is presented: How does a rural Appalachian school district experience continuous systemic improvement?

This description is built by exploring the following questions as they apply to districts that are small in population and not located near a metropolitan center (rural) and are building upon effective practices already present while correcting those that were determined to be ineffective (i.e., continuously improving):

- What are the educators' views about the continuous systemic improvement efforts implemented by the school district?
- What do the educators involved perceive as the major factors influencing the improvement efforts of the school district?
- In what ways do collaboration and relationships with colleagues affect improvement efforts?
- How do outside influences affect participants in the improvement process?
- How do educators see their role concerning the continuous improvement efforts within the system?

Key Terms

This research project encompasses an exploration of changes, reform, and continuous systemic improvement within public schools in Alleghany County, North Carolina. While many use the terms change, reform, and continuous improvement interchangeably, it is necessary to introduce one term that, for the purposes of this study, will capture the meanings of other terms commonly used. While Webster's Dictionary defines the term *change* as a verb meaning to replace with something radically different, this does not fully capture the efforts of Alleghany County. The dictionary goes on to define *reform* as putting an end to an [abuse] by introducing something better. This also does not wholly capture the experiences within the district. Throughout the study, I use the term *continuous improvement* in order to describe adequately the efforts of Alleghany County. This definition best captures district efforts to build upon effective practices already present within the system while correcting those that were determined to be ineffective. This definition abandons the deficit-based orientation common in reform and replaces it with a mindset based upon promoting success,

growing in one's capacity, and never ceasing to find new ways to meet the ever-changing needs of our students.

In order to capture the essence of Alleghany County, a definition of *rural* will also need to be determined along with an understanding of commonly accepted models for continuous improvement. Across the United States, the demographics of what constitutes a “rural” school district are varied, with examples ranging from California to the geographically isolated and impoverished areas of Appalachia. There is no single definition of “rural” (Budge, 2006; Coladarci, 2007; DeYoung, 1992; Hargreaves, 2009). There are over 19 different sources for definitions of the term rural. Within these sources, the definition depends primarily on population density (Hargreaves, 2009). DeYoung explains that the default definition of rural within the United States focuses on community proximity to a metropolitan area. Using this definition from the US Census Bureau, Alleghany County is classified as “nine” on a scale of one to nine whereby “nine” is reserved for the most rural counties in the United States. Alleghany County earns the description of a “nonmetro county completely rural or less than 2,500 urban population, not adjacent to a metro area” by the U.S. Census Bureau (2010).

Hargreaves (2009) outlines a generalized description of rural communities in the following quote:

People use the word ‘rural’ as a generic concept in everyday conversation to describe the location of a house or village, the place where they will spend their vacation or perhaps the area in which they grew up. They understand each other well enough and might visualize an area with few dwellings, accessed by narrow roads or tracks. It might be mountainous, plain or undulating, with lakes and trees, or perhaps stony

ground, rocks or scorched earth, or whatever characterizes the land away from the towns and cities they know. . . . There follows, therefore, a discussion of different ways to define this elusive concept statistically, culturally, geographically and psychologically. (p. 82)

Another common definition-or more accurately-perception of “rural” is synonymous with “agricultural.” While this may have been true in the past, this correlation is becoming less valid. Coladarci (2007), Dobson and Dobson (1987), and DeYoung (1992) describe a variety of types of “rural” communities including “high growth,” depressed, “stable,” and “isolated.” Sherwood (2001, p. 3) outlines “poor rural” and “wealthy rural.” What is consistent is that variables such as growth, stability, wealth, and isolation affect school populations and the success potential of change within the district. Educational leaders who consider these variables are better able to plan improvement activities that have been found to be effective in similar districts and thereby increase their own opportunities for success.

Budge (2006) reiterates that although it is difficult to establish a common definition, rural school districts share a common set of strengths and challenges. He describes these as being:

- Low population density and isolation
- School and community interdependence
- A history of conflict regarding purposes of schooling
- An “out-migration” of young talent, and a salient attachment to place (p. 2).

Each of these dynamics are seen not only in Alleghany County demographics but also within the interviews presented within this study.

Other key terms are used throughout the study and are worthy of definition to aid the reader. These terms include:

Table 1. Key Terms

Term	Definition
Educator	A term meant to include teachers, teacher assistants, administrators and student support personnel employed by the school system
LEA	Local Education Agency; a school district comprised of more than one school and coordinated by a central administration
Organizational Culture	The attitudes, beliefs, customs and norms that are inherent to an organization
PLC (Professional Learning Community) System	A collaborative group of educators whose purpose is to improve educational outcomes for the students they serve. A group of elements which have been brought together into a unified and connected network of concepts and relationships (Gibson, 1999, p. 62)
System Change	Change of a system over time from one state to another, the patterns of whole system behavior over time

Context

Alleghany County, North Carolina is in the heart of Southern Appalachia. Appalachia is defined geographically as a region of the United States which consists of parts of twelve states and the entire state of West Virginia that follow the spine of the Appalachian Mountains from southern New York to northern Mississippi (Appalachian Regional Commission, 2013; Glass, 2010). Largely because of its lingering geographic isolation, Appalachia has developed and retained a rich cultural heritage based on natural resources, arts and crafts. Stewart (1996) described Appalachia as one of the “other” places where:

In literature from the 1830s to the 1870s, people from the hills were at once portrayed as tough pioneers, grotesque figures, and tricksters. An antimodernist preservationist movement [later] saw the hills as an enclave of culture that has been preserved

against the ravages of time and progress. “Appalachia,” like the inner city, became a symbolic pocket of poverty in an affluent society and an unassimilated region in an otherwise united nation (p.118).

This same portrait of the Appalachian experience can be applied to Alleghany County, North Carolina, which exists on the crest of the Blue Ridge Mountains, well within the geographic confines of Appalachia. The following text describes the culture and economy of the county as well as the educational system and specific improvement efforts.

Culture. The routes into Alleghany County involve winding two-lane roads on Wilkes Mountain, Jane Taylor Mountain, Elkin Mountain, Twin Oaks, or Low Gap Mountain, which are often all the more treacherous because of dense fog or black ice. These conditions further isolate the county from urban influences and modernity.

Families enjoy sporting events hosted predominantly by the schools or groups who utilize school facilities. There are notable festivals throughout the year celebrating the county’s heritage and Christmas tree industry. Summer is a time of entertainment with weekly lawn mower races and mudslings. Cruise-ins and ridge rides that celebrate the county’s moonshine heritage occur in the summer. On Halloween, local businesses host a Trunk or Treat at Crouse Park, and if one knows the right people, one could obtain a bottle of Apple Pie moonshine. The local quilters’ guild hosts an annual show, and mountain music is performed from the front porch of The Crouse House located in the county’s small municipal park. Tourists who may wander throughout the county seat will more than likely see deer grazing in a yard within the town limits. They may also stroll by the high school cattle pasture located within two blocks of Main Street.

Alleghany County's rich history of subsistence farming and moonshine production and its reputation as the "Lost Province" offer insight into the culture of the county. The "Lost Province" moniker is derived from the county's extreme isolation jokingly described as "the only way to get there is to be born there" (Tabler, 2012). This isolation continued in Alleghany County long after surrounding counties began to thrive. The distinct culture of this area, accompanied by high poverty and extreme isolation, affects the progress of the county and its educational system.

Economy. Accessing goods and services is problematic in Alleghany County. Few local businesses exist in the district, and inventory is limited in many. There are few businesses located outside of the town limits. Families that wish to shop locally must do so before 5 p.m. when, as the locals say, the town of Sparta shuts down. Although historically this routine has been sufficient for the citizenry of the county, this is no longer the case. Modernity seeks greater variety in products, longer hours of service, and more convenience (Keefe, 2000, 2008). If Alleghany County families want to shop at the local Wal-Mart, they must drive a minimum of 35 minutes to do so. Many families choose to combine these routine shopping trips with other activities that take place in areas that are more metropolitan.

Unemployment rates within Alleghany County are higher than the state average and the median household income is lower than the state average (Data provided in Appendix 1). Factories such as the Kraft Cheese Factory, Hanes Mills, and Troutman Industries closed, sending jobs to Mexico in the 1990's (Keefe & Hatch, 2000). Since that time, the county's three largest employers have been the school system, the hospital, and the local mental health provider. In 2011, the local mental health agency closed, and a new provider with a smaller staff later absorbed the clients (Royal, 2011). In 2012, the hospital faced its own financial

crisis and contemplated closing. Numerous lay-offs have occurred there as well (LaRue, 2012). As reported in unpublished meeting minutes of the Golden Leaf Foundation Community Assistance Initiative, many of the county's workers must drive off the mountain each day for work. The county, like 40 other districts across North Carolina, is a Tier I community in terms of economic development, meaning that it is among the most economically distressed in the state.

Agriculture is in decline in Alleghany County. Many of the large dairies have gone out of business as milk subsidies have decreased. A few families still maintain beef cattle farms. Christmas trees and pumpkins are the predominant agricultural products for the county, but most labor in these markets is provided by migrant workers. Beekeepers hold monthly meetings to discuss how to invigorate their honey production. Sourwood production is limited in the area, but keepers try to maximize secondary demands for Locust and Clover honey and supply demands for Poplar honey (NC Rural Economic Development Center, 2013; United States Department of Agriculture, 2013).

Alleghany County is described as a "dying county" by the researchers at the Keenan Institute (Johnson & Karsada, 2011). This terminology is used to describe counties with aging populations, death rates higher than birth rates, and negative population changes (Johnson & Karsada, 2011; NC Rural Economic Development Center, 2013; U.S. Census Bureau, 2010). Over 20% of the county's population is over the age of 65 (NC Rural Economic Development Center, 2013; US Census Bureau, 2010). The 2011 suicide rate within the county exceeds the state rate by 6%. From 2007-2011, Alleghany County held one of the five highest suicide rates per capita in the state (NC State Center for Health Statistics, 2011).

Education. Alleghany County Schools is the only school district in the county. This organizational structure is not unique within North Carolina as 42 other counties each have a single school system as well. The only private school in the county, Blue Ridge Christian Academy, was established in 2010 and serves approximately 35 students (Blue Ridge Christian School, 2013). There are no public charter schools within the county (NC Department of Public Instruction, 2012). The four public schools that make up the school district are geographically isolated from one another with travel distances of 25 miles between the two outlying schools. The location of each school is shown in the map presented in Figure 1. Pseudonyms are used to identify each school.

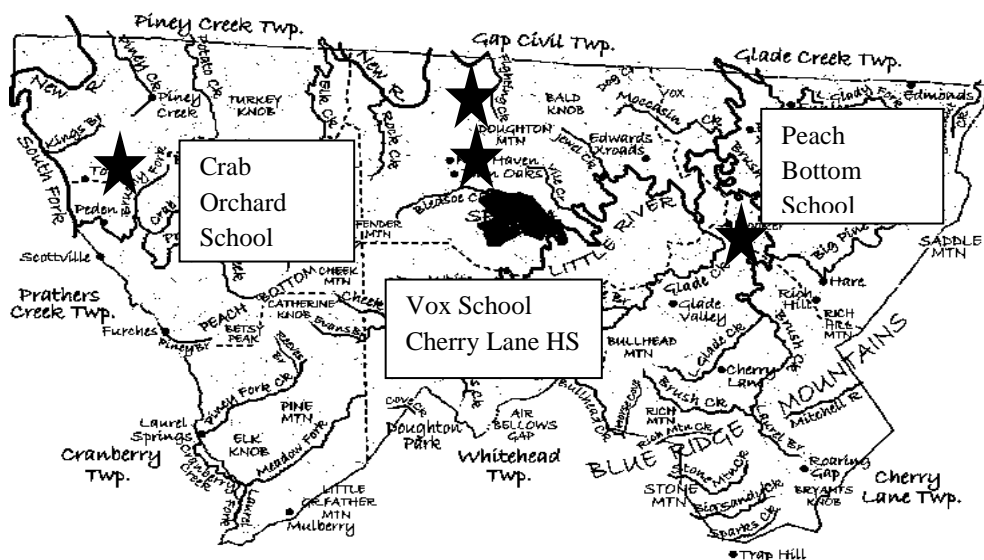


Figure 1. Map of Alleghany County (Alleghany County Government, 2013)

Demographic data show that the school system consists of four Title I schools, which serve the educational needs of approximately 1500 students countywide. Unpublished district demographic data show that of these 1500 students, 67% are eligible for free and reduced lunch with two of four schools exceeding 70% eligibility. Despite these barriers, the school district has shown continued improvement and success on state proficiency tests,

achievement of Adequate Yearly Progress, and high attendance and graduation rates. The data presented in the table below show that the school district is outperforming other districts across the state on educational assessments. The North Carolina School Report Cards published by the North Carolina Department of Public Instruction for the 2011-2012 school year show that Alleghany County had higher proficiency rates than the state averages in reading and mathematics at each tested grade level in grades 3-8. The report card also shows that the district has higher proficiency rates than the state averages in English I, Algebra I, and Biology. The county's cohort graduation rate is also higher than the state average. Alleghany County Schools has also been recognized for having one of the ten lowest dropout rates in the state and was recently acknowledged by Governor Beverly Perdue as one of the first ten Digital Innovators across the state of North Carolina (Ketchum, 2013).

Table 2. Academic Indicators

Indicator	Alleghany	State
EOG Proficiency		
Mathematics	76.9%	71.2%
Reading	88.0%	88.0%
EOC Proficiency		
English 1	85.8%	82.9%
Algebra 1	81.4%	78.7%
Biology	94.0%	83.0%
Cohort Graduation Rate	86.0%	81.0%

In a statewide comparison of districts, Alleghany County is most similar to North Carolina's Graham and Mitchell Counties in rural and poverty indicators in the same mountain region of the state (Data provided in Appendix 2). When compared with these similar districts, Alleghany County also shows educational accomplishment. The table in Appendix 3 shows that the district outperformed similar counterparts in mathematics proficiency for grades 3-8 and had comparable performance in reading at the same grade

levels. The table also shows that Alleghany County had higher proficiency rates in Algebra I and Biology than the similar districts represented. The proficiency percentages for all categories were higher than the state averages for the same categories.

There is a prevalent attitude in Alleghany County that “all the smart kids leave.” The threat of “brain drain” is common to rural areas, and there is evidence of this assertion in the most recent Alleghany County census reports. Data in the census show that 68.4% of the county’s population holds a high school diploma and only 16.5% of the population holds a bachelor’s degree or higher (US Census Bureau, 2010). The same recent Census report shows that the population of the county has only increased by 4.5% over the past ten years, well below the state and national rates. These statistics are compounded by the fact that 19.3% of the population is living below the poverty level. This statistic represents a rate that is 4% higher than the state average (US Census Bureau, 2010).

Throughout the last five years, the school district has encountered diminishing fiscal resources. The school district has implemented what rural school leaders consider unfunded mandates and processes that target rural school districts unfairly (Jimerson, 2005; Kannapel, 2000; Seal, 1995). According to Seal (1995):

Rural school districts must implement educational reform in the context of scarcity.

The customary characteristics of small scale, isolation, and scarcity are difficult to overcome . . . Rural schools in Appalachia face fiscal scarcity from poverty, a weak tax base, and insufficient state and federal aid. (p. 5)

In spite of these barriers, Alleghany County Schools has received numerous competitive grants that have helped to relieve some of the financial stressors and allow progress to continue. These grants include two Golden Leaf Foundation grants aimed at improving

instruction in Science, Technology, Engineering and Mathematics (STEM), two Math and Science Partnership Grants, and two reading grants.

Continuous systemic improvement within the district.

One role of any school system is to develop a stable workforce for the jobs that will keep the community vital (New Schools Project, 2013). The most recent NC Workforce Development Report (2011) showed that the largest area of job growth within North Carolina was in Science, Technology, Engineering, and Mathematics (STEM) careers. A survey completed by the employees and students in the district showed that in order for efforts to be successful in increasing the number of students entering a STEM focused workforce, district leaders needed to refocus their instructional efforts. The task before the school district required that leaders increase student interest in STEM areas, improve the quality of the curriculum by offering more rigorous course offerings, and meet the basic needs of effective curriculum implementation like materials and supplies. School leaders needed to increase the confidence and competence of teachers in STEM instruction.

In order to meet changing workforce demands, it was essential that leaders develop a vision for the school system that would address academic needs as well as the needs of the community at large. A district needs assessment was conducted, and a strategic plan was developed. The leadership team of Alleghany County Schools invited Bill Daggett of the International Center for Leadership in Education to speak to the staff regarding the Rigor and Relevance Framework promoted by the center. The district sent several teams of teachers to the Model Schools Conference in Atlanta, Georgia, and Nashville, Tennessee, as a means to increase awareness of the need to raise the rigor of instruction and make lessons more relevant.

Instructional staff members were also confronted with mandates to implement the Common Core State Standards (CCSS) along with other districts in the state and nation. Educational leaders saw that there was little connection among initiatives and limited opportunities for a more rigorous learning environment. Consequently, the leadership team followed the suggestions of Fullan, Cuttress, and Kilcher (2009) and conducted staff activities that allowed educators to see the larger design of the efforts. The specific efforts of the district are represented in Table 3.

Table 3. Outline of District Improvement Efforts

Time Period	Focus Area	Initiative	Source	Components
Fall, 2008	Reading	NC State Improvement Project	State Grant	<ul style="list-style-type: none"> Professional development for teachers Use of formative assessments Materials and supplies
Spring, 2010	Dropout prevention;	North Carolina Dropout Prevention Grant	State Grant	<ul style="list-style-type: none"> 1:1 Laptop Initiative for at-risk students Enrichment activities and tutoring for all students
Spring, 2010	STEM education; increased rigor	Golden Leaf Foundation STEM grant	Foundation Grant	<ul style="list-style-type: none"> Participation in LASER Institute Model Classrooms Professional Learning Communities Formative assessment
Spring, 2010	Reading	NC Quest Reading Grant	Local partnership with University	<ul style="list-style-type: none"> Professional development Student assessment and interventions
Fall, 2011	STEM Education; increased rigor	Golden Leaf Foundation Community Assistance Initiative	Foundation Grant	<ul style="list-style-type: none"> Science lab renovation Tuition reimbursement for master's Instructional technology support Project based learning
Spring, 2013	Increased rigor	NC New Schools Project	Federal grant	<ul style="list-style-type: none"> Professional development Project based learning
Spring 2013	Mathematics education; increased rigor	Appalachian State University Quest Grant	Federal grant	<ul style="list-style-type: none"> Professional development Tuition reimbursement for teachers pursuing advanced licensure

Each of the initiatives pursued by Allegheny County Schools represented thoughtful consideration of the needs of the students affected. While many more opportunities for

educational reform present themselves, the district has made a concentrated effort to focus on enhancing workforce development in the STEM areas, improving reading instruction and increasing the rigor of instruction throughout the district.

Continuous STEM improvement within the district. In accordance with the needs represented in the district-wide needs assessment and research on workforce development needs, members of the Alleghany County Schools leadership team pursued avenues to improve STEM instruction within the district. In March of 2011, Alleghany County Schools was awarded a \$325,000 Golden Leaf STEM Initiative grant designed to transform STEM education within the district by increasing academic preparedness and rigor in order to develop a viable work force. The goal of this endeavor was to increase the number of students graduating from high schools with the skills necessary to be successful in collegiate STEM coursework or for CTE certificate completion at the Applied Materials Lab at the local community college. As part of the application process, a comprehensive review was conducted. This assessment, along with informal observations, showed that teachers were using some research-based, inquiry-centered science curriculum materials but that this use was based upon individual teacher decision. District leaders knew that there was not a systemic plan for or evidence of staff development for supporting the implementation of a research-based, inquiry-centered STEM program. Instead, use was limited to some individual schools and isolated teacher groups. The district did not have a process for acquiring curriculum materials that incorporated authentic assessments. The leadership team, consisting of the superintendent, assistant superintendent, curriculum directors, and school-based leaders, recognized the need for a materials support system for science, but there were no plans to develop such a system.

In the summer of 2011, the district leadership team sent 17 teachers, administrators, and community college and Appalachian State University partners, as well as county government officials to the International Science Education Institute for Leadership Development in Washington, D.C. This nationally acclaimed LASER (Leadership and Assistance for Science Education Reform) Institute has established a reputation for working with school districts to develop a comprehensive science education plan. This process builds upon best practices and knowledge of the research to redesign district infrastructure and enhance student performance (Building Awareness of Science Education, 2010). District leaders were able to work beside teams from across the United States, Asia, Mexico, Thailand, Canada, and Oman to complete a self-assessment of each district's current STEM status and then design a multilevel strategic plan that met the individual needs of the participating districts. Through the LASER strategic planning sessions, district leaders were able to work collaboratively with teachers and community leaders to define an appropriate curriculum, garner community support, develop a materials support system, and identify high quality staff development for teachers. By participating in the LASER Institute, district leaders forged a partnership with the Rural Schools Investing in Innovation Grant representatives, allowing the district to leverage existing Golden Leaf funding to access additional professional development opportunities. In other words, the district leadership team was able to garner the public and political support endorsed by Anderson (1993) while collaborating with all stakeholders as promoted by Johnson (2007).

Funding was included in the initial grant budget to ensure that model technology classrooms would be established. Teachers would be asked to apply to host a classroom that would have a SMART board, a document camera, a response system, and a classroom set of

laptops. Approved teachers were expected to serve as teacher leaders throughout the system, thereby expanding the private areas of influence seen as effective in the work of Ryder and Banner (2011).

In September of 2012, the district leadership sent a team of thirteen teachers to Utah for the Professional Learning Communities (PLC) at Work Conference. Two additional teams participated in subsequent meetings of this conference. Participants explored research-based processes designed to enhance collaboration among school and district level teams while implementing appropriate instructional methodologies. By establishing professional learning communities within each of the schools, the district leadership addressed the social collaborative needs of teachers identified as being critical in educational reform. The leadership team, in essence, provided the collegial support espoused by Tytler (2010) and influenced the collective norms promoted by Crippen, Bieisinger, and Ebert (2010).

In the fall of 2012, Alleghany County Schools submitted and was awarded a Golden LEAF Foundation Community Assistance Grant totaling \$1.2 million. This project built upon the previous Golden LEAF STEM grant and was specifically designed to enhance Alleghany County's economic development endeavors. This initiative included continued work within professional learning communities, implementation of project-based learning, renovation of two existing science labs at Alleghany High School, hiring instructional technology facilitators, tuition reimbursement for teachers completing a master's degree in Instructional Technology, and expansion of the model classroom concept. Members of the district's leadership team collaborated with the North Carolina New Schools Project to provide professional development from the Buck Institute for Education within the county. This allowed 35 teachers to participate in an intensive project based learning training from

nationally recognized staff with additional professional coaching scheduled throughout the year (Buck Institute for Education, 2013).

Alleghany County Schools has also benefitted from the award of an NC Quest Grant focusing on mathematics along with partners Appalachian State University and Wilkes County Schools. This endeavor allows teachers throughout the district to benefit from intensive training on foundational mathematics instruction and sound methodologies.

Appalachian State University partners created a cohort program enabling selected teachers to obtain mathematics licensure through a tuition free academic program. As part of ongoing professional development, teachers will also attend the North Carolina Council of Teachers of Mathematics Conference. The district has also participated in activities provided by a Teacher Algebra Network grant (2007-2010) and an Appalachian Mathematics Partnership Grant (2011-2014).

Continuous systemic improvement in reading. Alleghany County Schools has participated in the North Carolina State Improvement Project (NCSIP) for the past five years. This project is designed to address the foundational reading needs of students with disabilities through a federally funded state project. The initiative began at Sparta School in response to the school's status under No Child Left Behind. A disaggregation of test data showed that the reading scores of the students with disabilities subgroup was in need of concentrated attention if the school was to pull out of school improvement status.

The North Carolina State Improvement Project (NCSIP) provides the personnel development necessary to improve reading instruction for all students, but most specifically, for those students with disabilities. For Alleghany County, this personnel development included Reading Foundations training for all elementary teachers in the school. The district

pursued a novel approach by requiring the training of afterschool staff as well. This requirement ensured that afterschool group leaders used the same teaching methodologies as school day instructors when assisting with homework and other activities. Teachers were also given assistance in matching curriculum with specific student needs and were monitored to ensure that the curriculum was being implemented with fidelity. Teachers within the district were trained to use formative assessment to make data guided instructional decisions.

The Alleghany County NCSIP project expanded to the schools in the eastern and western sections of the county. Additional support for district efforts in reading was accomplished with the attainment of an Appalachian State University Quest Grant targeting adolescent literacy. This project provided more in-depth training in adolescent literacy and allowed the district to address the needs of students at the high school level.

Academic rigor. School leaders believe that in order for students enrolled in Alleghany County Schools to be successful in college and post-secondary careers, a greater emphasis is needed on academic rigor within all subject areas (North Carolina New Schools Project, 2013). For this to occur, the district collaborated with the North Carolina New Schools Project as part of their Investing in Innovation (i3) Federal Grant Program. The New Schools i3 rural project is based upon an expectation that all students will participate in college preparatory courses. Students are encouraged to complete 21 college credits or more while in high school. The program provides the financial assistance necessary for students to do so. Students are able to access college credit coursework as early as the tenth grade. In order for students to be successful in this more rigorous environment, the high school must align the academic program with state standards as well as with the standards adopted by a postsecondary partner for entrance into and success in college courses. In order to

accomplish this goal, teachers are trained to use formative assessments to inform classroom instruction. Teachers also receive professional development in literacy-rich classroom methodologies such as collaborative group work, writing-to-learn, and oral inquiry. College and financial aid application assistance is provided for the families of the students involved.

Significance

With the emphasis placed on educational reform by *A Nation at Risk* (National Commission on Excellence in Education, 1983) and the *No Child Left Behind Act* (2001), it is surprising to find little empirical research on continuous improvement in educational settings specific to rural culture. Current research about change and/or continuous improvement in rural school districts is somewhat limited, with the bulk of empirical exploration being products of the 1980s and 1990s (i.e., Guskey, 1985a; Fullan, 2001). Most educational studies are discussed from urban, statewide, or international perspectives. Few empirical studies are focused on the particulars of the rural experience. This presents a gap in research. More is needed to give current perspectives on improvement efforts in the 21st century particularly as it relates to rural education. Rural communities exist in every state. Over one-third of students in the United States are educated in rural settings, representing a significant segment of our population. Research presented in this study will show that each of the aforementioned aspects of rural districts have a direct bearing on the implementation of improvement efforts within a school district and have a unique influence within rural settings.

Outline of Dissertation Chapters

In this first chapter, change processes are introduced. Specific change models are outlined, critical elements are provided, and a rural perspective on educational reform issues

is described. The problem is stated, and the purpose and significance, research questions, and key terms are identified.

Chapter Two consists of a comprehensive review of the literature as it relates to the research question presented. The researcher examined personal, political, and cultural influences in order to provide a more in-depth view of change processes as they occur within the rural perspective.

A detailed discussion of case study research methods is presented within Chapter Three. The discussion includes a theoretical framework and specifics regarding case and participant selection. Data collection procedures for surveys, individual interviews, and document reviews are presented, along with coding and analysis processes and specific methods for ensuring the confidentiality of participants. Researcher biases and efforts to mitigate them are also described.

Chapter Four is devoted to reporting the research findings. Participant responses are described consistent with qualitative research. In this description of findings, prevailing themes of educator's perceptions as they undergo change processes within the district were generated. Commonalities and discrepancies are discussed. I describe how data are triangulated to provide greater validity to the research findings.

The final chapter encompasses a summary of the findings and conclusions generated based upon those findings. Ideas are provided for generalization to other similar projects as well as posing new questions for further research.

Chapter Two: Review of the Literature

Introduction

One need only enter any bookstore and examine its contents to realize the obsession that our society has with change. Book shelves are filled with the best ways to change one's diet, change personal outcomes on standardized tests, change the electrical circuitry in any outlet, or greater yet, change an organizational structure.

The business and educational worlds seek effective leaders who are successful at implementing change. Businesses rise and fall based upon the ability of the leaders to manage change or not (Fullan, 2008). In the educational setting, change creates an air of instability among teachers who are trying to figure out new personalities, new instructional methodologies, and new focus. New principals try to determine exactly how to address the weaknesses they see in their new school and how to make the school setting reflect their own professional values (Lynch, 2012; Marzano, 2009; Reeves, 2009).

The following literature review is developed through a systematic search for classic and empirical research that captures the essence of educational improvement as seen through the eyes of rural educational structures. The review includes a description of a theoretical lens with which to view the study proposed. Significant gaps in the literature are identified. A historical perspective on change theory is presented and used to examine differing approaches to exact change within educational institutions, while outlining the critical elements of the change process and the empirical research present for each element. The change process in rural settings is then described.

Change, Reform, or Continuous Improvement?

On a personal level, change is difficult at best. Defining change is even more difficult due in part to the issues that change generates. Vetrivel (2010) describes four categories of issue that include the feelings of competence of teachers, changes in relationships, and conflict and loss of meaning for some people involved in the process. For many, simply the word “change” conjures feelings of inadequacy and error. The description of a proposed change is interpreted as a condemnation that someone has been doing something wrong. Reeves (2009) states that:

The common theme in each of these reactions is that change leads to loss – not just any loss but a devastating and personal loss. Opposition to change spreads like a virus, and the irrational fears of a few are quickly transmuted into mob rule. (p.9)

Sarafidou and Nikolaidis (2009) further describe this emotional aspect of change and the negative emotions generated specifically by change that is imposed upon educators by outside forces. They iterate:

Changes are generally strongly associated with emotions, as emotions form the background for any urge for change. An imposed change, for example, may generate negative emotions like anger, fear of losing something important and anxiety in the face of the unknown, while self-initiation of change is usually accompanied by excitement and hope. (p. 432)

Within their study, Sarafidou and Nikolaidis find that when educational leaders consider the emotional history of change efforts within a district, they are more successful at implementing the change proposed. When that change was initiated by the teachers

themselves rather than from the administration, the change was embraced more positively and with a greater sense of urgency.

Vetrivel (2010) expands upon the impact of change by stating that:

Without a doubt, today's ever-quickenning cycle of change is unprecedented. Change is faster, more erratic, and more elemental than ever before. A collision of technological, competitive, and cultural pressures is forming the vortex of what we have begun to call the information age. Rapid advances in information technology have resulted in the increased quantity and the immediate availability of information. This proliferation of information is helping to fuel the requirement for change and to accelerate the change cycle. The pace of change has had an impact on the organization and its people. In the past, periods of intense change have followed by a period of stability when organizations have learned to function in their new environment and structures. However, such a period of stability is very unlikely to occur today. (p. 2)

In essence, organizations must and are continually improving. In order for this improvement to be effective and sustained, critical elements and processes such as supplies and materials, stakeholder buy-in, leadership, and teacher morale must be addressed (Blalock, 2008).

Educational Improvement: The Basics

“Educational change refers to a change in structure, form, or functioning of an education situation or system with the aim of improvement” (Sarafidou & Nikolaidis, 2009, p. 431). Theorists are coming to greater consensus that change is not an explicit occurrence, but a process that can be triggered by a specific event (Fullan, 2006; Hall & Hord, 2011;

Reeves, 2006). It is critical for leaders to understand this process. If one does not understand the dynamics involved with continuous systemic improvement, then one is destined to endure a series of innovations without lasting impact. Without a deep understanding of how each element of the process interacts with the other, continual improvement is unlikely (Blalock, 2008; Harris, 2011).

Fullan is perhaps the most noted change theorist in recent literature and without an examination of his contributions, a review of the literature would be lacking. Schofield (2001) asserts that:

Though far from a household name in his own land, the 60 year-old academic [Fullan] is recognized as one of the world's foremost authorities on educational reform. Through years of hands-on work, Fullan has proven that successful reform is achievable. But it is never an easy task. (p. 4)

Stoll (2006) concurs by stating, "Michael Fullan has made an enormous and powerful contribution to the field of educational change" (p. 1), and goes on to state, "Michael Fullan put the meaning of educational change on the agenda" (p. 3). In 2006, Fullan examined a series of three "flawed change theories," theories of action "with merit" and what he describes as prospects for future use of change knowledge. Fullan states quite emphatically that the missing component in many reform efforts is the appreciation of the school or district culture. Fullan (2006) states that if we do not answer the question, "How do we change cultures? Our efforts at systemic improvement will fail" (p. 4).

Fullan's (2006) case studies of specific initiatives in Chicago, Milwaukee, and Seattle show that even with adequate funding and a specific plan for reform, the districts in question were unable to sustain improvements on a large scale. Fullan asserts that these failures were

due, in large part, to an inability to change the school culture. Fullan (2006) goes on to present seven core premises that are critical for sustaining education reform:

- A focus on motivation
- Capacity building with a focus on results
- Learning in context
- Changing the context
- A bias for reflexive action
- Tri-level engagement, and
- Persistence and flexibility in staying the course. (p. 8-11)

Fullan (2008) asserts that engaging educators' sense of moral purpose is not enough to ensure effective change. Teachers who have a greater investment in the design of any given project are more committed to the success of the project. Building the capacity of educators to implement the given change goes beyond simply giving teachers time and resources to implement new initiatives but requires that a supportive infrastructure be built and maintained. Fullan emphasizes that the climate of the district must change so that it is conducive to the new reform. Reflexive action includes a sense of ownership that is developed throughout the reform process and is enhanced when the school, community and district/state are aligned or engaged. Finally, persistence and flexibility is required if any initiative is to survive the inevitable hurdles that naturally occur with any improvement effort. These seven core premises can be addressed effectively in order to gain the sustained support of teachers. In order to weather economic, political, and theoretical storms successfully, educational leaders are responsible for nurturing and developing their teachers, providing leadership opportunities within existing structures, and cultivating an organization

that can withstand adversity and prosper in spite of an ever-changing terrain (Marzano, 2009; Reeves, 2009).

Adams (2007) argues that many policies and plans for reforms are adopted centrally rather than at the local level, and few actually fulfill the expectations of those involved. This frequent failure at reform is well documented. Rizzo (2012) detailed this same course of educational reform in her presentation to Appalachian State University doctoral students. Rizzo articulated that most reform initiatives are based upon a deficit model as a response to a specific report or trend that shows a district lacking in one or more areas. This perspective causes teachers to become resistant and valuable core issues are missed as districts search for the magic bullet.

Klein (1996) and McGinn (2002) prefer models of continuous improvement rather than a series of individual reform initiatives. Klein's (1996) work outlines the continuous improvement perspective of the reform process through the Change Implementation Model. This model consists of seven steps focusing on people, leadership, trust, vision, enablement, celebration, and finally, institutionalization. Educators must know the basic purpose of the change that is being proposed and be able to create a vision of how the organization might look after the change occurs. Teachers need a strategic plan of the actual changes to be implemented and an understanding of how they will make transitions. Teachers must know and understand the part they will play. Furthermore, Klein (1996) describes an enabling environment where teachers are provided with the needed training, potential barriers are identified, and the change becomes a part of the culture of the school, district, or state.

Critical Elements

A review of the literature shows that there is no one “approved” model of school reform; however, the literature does present a collection of elements that must be present in order for educational reform to be successful and sustained. Mason (2008) states that:

To change the ethos of the school, then, requires intervention at every possible level.

These levels would include factors associated with the state and its education and economic policies, and possibly factors beyond even the grasp of the state – those that are associated with the forces and consequences of globalization. For example, they would include factors associated with the school’s leaders and with its teachers, with the students themselves, with their parents, with the curriculum, with the school’s organization, with the local community – the list is probably endless. (p.45)

Understanding each of these elements and the ways they interact will allow educators to intervene appropriately and in the end, implement change processes directly related to the desired results.

Teacher commitment. Crandall (1983) examines the single most critical factor in school improvement: people. He provides an enduring examination of the relationship between teacher commitment and the success of school improvement. Crandall goes further to assert that the key to successful school improvement is in developing the commitment of the teachers involved. When discussing institutional change, theorists have long touted the importance of eliciting buy-in from those most directly involved in the change process. Researchers have forecast the pending demise of any effort at reform attempted without the buy-in or commitment of the teachers involved.

Harrison (2012) stated that educational leaders must either create a vision so compelling that teachers want to be part of the reform or there must exist a perceived threat of demise. Tytler (2010) continues this theme by pointing out the need for literature on the barriers of reform that takes the argument past that of teacher reluctance based upon personal knowledge of a subject matter to that of incorporating personal belief systems and vision. In principle, teacher commitment to the reform is based upon a vision between the teachers and leaders rather than a simple reluctance to engage in the efforts based upon feelings of confidence in the area addressed. Researchers explore the social, individual, political, and economic aspects of teacher thinking identified as being important in their adoption of reform activities (Crippen, et al., 2010; Ryder and Banner, 2011).

Southerland, Sowell, Blanchard and Granger (2011) and Tytler (2010) outline the work of establishing changed practices for teaching; work that is fostered over time through a process of gathering instructional and collegial support. By developing the private arenas of influence (social networks) described by Ryder and Banner (2011), the public arenas (committees and boards) are impacted and major reform can be executed. Southerland et al. (2011) make clear that teachers are more willing to embrace reform if there is attention to intrinsic psychological issues. If teachers are satisfied with a particular aspect of their teaching practice, there is simply no reason for them to change their teaching methodologies. Unless people actually believe that there is a need for continual improvement, there will be minimal commitment and little reason to engage in the reform process. Crippen et al. (2010) confirm that leaders who understand these individual belief systems are able to develop productive collective norms by enhancing the relationships of individuals within the school and will be successful at organizational change and improvement. Leaders who can attend to

the intrinsic psychological and social needs of educators have greater opportunities for successfully implementing continuous improvement activities.

Fullan, Cuttress, and Kilcher (2009) describe eight specific forces that educational leaders must address in order for systemic change to occur. This work emphasizes the importance of engaging one's moral purpose. This engagement can cement any reform effort. Fullan et al. (2009) explain that evoking one's moral purpose is not simply a goal or a directive, but a process where teachers, community leaders, and the community at large are morally aligned with the focus of any project. Without this single component, the work of reform is difficult at best.

Kelchtermans (2005) examined the role of teachers' emotions in educational reforms. The primary thesis presented was that teacher's reactions (or degree of commitment) to educational reform initiatives are affected directly by the social and cultural context within which they occur. In the biographical narratives presented, the author presents evidence that initiatives that are in direct conflict with teachers' value systems will achieve limited success. The minimal success that would be achieved would most likely not be sustained. When a given reform effort challenges a teacher's sense of self-identity and thus makes him or her professionally vulnerable, there is an emotional reaction that can undermine the efforts within the district. Kelchtermans also examines the influence of timing, age and generation upon the emotional reaction and commitment to the initiative. In order for a district to implement any reform initiative successfully, leaders must disentangle the emotional component of change and at the same time manage the micro political dynamics. This has proven to be much more difficult in rural districts (Carlson, 2000; Harmon, 2009; Johnson, 2007; Seltzer et al. 1995; Sherman, 2011; Williams and Nierengarten, 2011). Issues such as

personal and professional isolation, teacher recruitment and retention, and a lack of financial resources can have a distinct impact on the way rural schools and communities respond to reform (Seltzer et al., 1995).

Crandall (1983) states that the key to successful school improvement is in developing the commitment of the teachers involved. The process of gaining teacher commitment is developed through teacher invention or engagement in the decision making process with administrators. The process of bargaining over implementation allows teachers to feel as if they are an integral part of the process; however, Crandall allows room for differences by outlining specific incidents where teacher commitment is developed after implementation with little or no involvement in the design of new initiatives or programming. Crandall's (1983) study shows that with appropriate supports, teachers can successfully implement a new initiative or program without having an initial buy-in but by developing the commitment over time. Crandall goes on to describe instances where clear, direct leadership from building and central office administrators in addition to training and continued support allowed teachers to see results within their students and thus develop the desired levels of teacher ownership and commitment. Crandall (1983) states that:

Earlier research and much of today's accepted practices rest heavily on involving teachers early in the improvement process, negotiating what is implemented and, therefore, settling in many cases for small changes in classrooms that resemble much of what was done before. Teachers are willing to implement these solutions, but to do so they need continuous help from credible people and clear direction from their building and district administrators. With these ingredients in place, the results can be strong commitment and benefits to students and teachers alike. (p. 9)

Guskey (1985) and Reeves (2009) support the work of Crandall by proposing that teacher commitment can be developed gradually and still result in successful change implementation. Both present evidence that gaining teacher commitment prior to implementation through input sessions, bolstering enthusiasm, etc., seldom changes teacher attitudes or increases teacher commitment to a process. Both present a “delayed buy-in” (Guskey, 1985; Reeves, 2009) model where staff development is provided, a change is made in classroom practices, improvement is seen as a measurable objective, and, consequently, teachers’ beliefs and attitudes are changed along with the level of teacher commitment. Teacher commitment is the result rather than the initial hurdle.

Couros (2003) examines specific characteristics whereby teacher commitment can be cultivated. Couros specifically examines factors affecting teacher commitment to include relative advantage; compatibility; complexity; trialability and observability. Rogers (1995) describes these traits as follows:

1. Relative advantage: the degree to which the idea is perceived to be better than the idea that it supersedes.
2. Compatibility: the degree to which the idea is consistent with the existing values, past experiences and the needs of those involved
3. Complexity: the degree to which an innovation is perceived to be difficult to understand or use
4. Trialability: the degree to which the potential adopters can experiment with the innovation or try it on a limited basis.
5. Observability: the degree to which the results are visible to others (pp. 15-16).

While these perceived attributes are critical for initial commitment for any reform effort to be successful, Rogers' work does not examine how these attributes are sustained over time.

Rogers, and later Fullan (2010), establishes that change with sustained impact must involve a change in the culture of the organization rather than a simple change in programs, policies, or procedures.

The impact of the teacher's personal domain upon the level of commitment to any reform effort is examined further by Day, Elliott and Kingston (2005). Day et al. specifically observe how teachers characterize their own levels of commitment to teaching as a whole by examining the factors that shape and sustain those levels over time. The work of Day et al. (2005) confirms that of Kelchtermans (2005) by emphasizing the consistency that must exist between any given reform effort and the value system of the professional. Day et al. specify school contextual factors that sustain commitment: sharing with colleagues, positive feedback, working with parents, shared values, and dynamic work environments. Day et al. elaborate on systemic factors that diminish levels of teacher commitment: the degree of the learning curve and time constraints, increase in bureaucratic tasks, lack of funding, reduction in autonomy, and lack of decision-making ability. Teachers who are allowed to participate actively in the decision-making experience sustained commitment.

The works examined establish that although initial teacher buy-in is not necessary for implementation of a specific innovation, development of this buy-in increases the likelihood of sustained success. Attention to the factors outlined above enhances teacher commitment allowing educational leaders to lead their districts through change effectively. Additionally, leaders within rural settings are challenged as they strive to meet the demands created by lack of resources while providing the necessary structures for educational innovation.

Building capacity. The second driver outlined by Fullan, Cuttress and Kilcher (2009) and Rizzo (2012) is that of building capacity. In order to build the collective capacity described by Rizzo as being an effective component of reform, educational leaders must address policies, strategies, resources, and action that will allow people to move forward with any change. Simplified front-end training is not sufficient to garner the collective capacity needed for a reform effort to be effective much less sustained. Ongoing development and continuous improvement allows educational leaders to implement change that is easily recognized and long lasting. Leaders must also develop cultures of evaluation where teachers examine ideas using data to determine effectiveness. Through the processes of ongoing evaluation, continuous improvement can be achieved and sustained. When data are used for improvement, major successes can be realized.

Securing the funding necessary for high quality training and the substitutes needed to make teacher participation possible is a major challenge, particularly in rural school districts (Harmon, Gordanier, Henry, & George, 2007). Connecting teachers with colleagues for instructional coaching and planning, consistent ongoing training and a plan to train new team members are critical aspects of any reform process. Day, Elliot, and Kingston (2005) present the argument that attention to these details of professional development enables teachers to “maintain a sense of self, self-esteem, and a commitment to do the job as well as possible in all circumstances” (p.572). Attention to these details can enhance opportunities for success.

Leadership. Fullan, Cuttress, and Kilcher (2009) describe the characteristics of change leadership that can yield the best results. Fullan (2001), as well as Masumoto and Brown-Welty (2009), asserts that the leaders with the most charisma are typically the least able to implement sustained change. Their work shows that leaders characterized as having

humility and dedication to the profession of education build the capacity of the organization more so than those who would focus on short-term results and personal advancement.

Leaders, who are not afraid to develop leadership in others, rather than see it as a threat, are essential for sustainable reform.

Vision. Kotter (2007) states, “Without sensible vision, a transformation effort can easily dissolve into a list of confusing and incompatible projects that take the organization in the wrong direction or nowhere at all” (p. 63). Innovations must be coherent and targeted. Staff members must be clear about how the big picture fits together otherwise the perception of serial beginnings can undermine reform efforts by creating innovation fatigue. Conrad (2006) defines a leader as one who “identifies and articulates a vision and successfully manages a solution” (p. 17). Little and Bartlett (2002), Jerald (2005), and Kotter (2007) assert that when the vision for the change is communicated clearly across all stakeholders and with adequate resources, supports, and time in place, school improvement is probable.

External support. Seal and Harmon (1995) state, “the need for constant educational reform is heralded by national and state policymakers but viewed dimly by local residents” (p. 3). Anderson (1993) elaborates upon the previously mentioned elements of reform by adding components that garner public and political support as a means for allocating capital and psychological resources and minimizing resistance to the new vision. The analysis of public and political opinion is examined further by Gurevich (2011) who completed an analysis of public opinion in order to focus on the conditions necessary for reform success and proposed ways to counteract public misunderstandings that eventually undermine efforts at reform. Calabrese (2003) presents the variety of paradigms that affect change in personal and collective behaviors, adding dimension to the previous work of Crandall (1983) and

Guskey (1985). Calabrese demonstrates change as a symbiotic relationship between the educational organization, the teachers involved, and external constituents. Calabrese presents the steps to the commitment process by describing the phases for change as seen through Martin Luther King's letter from a Birmingham Jail that was derived from the work of Gandhi. Calabrese outlines the process as collection of facts, negotiations, self-purification, or examination of one's motives, and finally the direct action of change. He asserts that the first level of implementing sustainable, transformational change is to assess the relationships present within the school, between the school, and to world outside its walls. Calabrese (2003) presents the argument that "quality without a cooperative, synergistic relationship within the school community and between the school community and external constituents is an illusion" (p. 13). Through the acts of data gathering and negotiations an administrator lays the foundation for eliciting the ever-important community commitment necessary for institutional change. Masumoto and Brown-Welty (2009) further assess the impact of multiple formal and informal school-community linkages that can provide valuable and needed resources for educational institutions. The success or failure of the endeavor is determined in the negotiations and development of community linkages. Ensuring that a reform effort has engaged in societal support is critical. Reform efforts must work within while striving to expand the constructs of the traditions in place in order to be successful.

Internal supports. Blalock (2008) describes the principal as a "change facilitator." The building level administrator takes on the role of advocating for resources, time, and professional development. This includes "maintaining the improvement efforts beyond initial implementation; extending the improvement effort after its initial success; and

adapting the improvement effort so that it survives and thrives over the long term” (Jerald, 2005, p. 2). Yet, perhaps the most critical role of the building level administrator is described by Jerald (2005) as “keeping a sharp eye on how the change process is affecting staff members and students while keeping a constant lookout for warning signs of obstacles that might threaten the effort” (p. 2). School leaders are advised to be aware of the impact change efforts have upon their staff and put measures in place to avoid implementation fatigue, frustration, and resentment.

Johnson and Crispeels (2010) wrote of the linkages between the central office and school reform within a district’s schools. The qualitative results of their work (interviews, observation, and data reviews) confirmed previous studies in the field including Day et al. (2005), Crandall (1983), and Calabrese (2003) by assessing the impact of not only district leadership, and that of teacher commitment to a given reform effort.

Perhaps the greatest resource that principals can provide for their staff is time. Blalock (2008) affirms existing knowledge that if teachers are to be successful, they need time to reflect on their learning and on their role in the change process. Day, Elliott, and Kingston (2005) concur that teachers need time to develop their commitment to the efforts and it is the role of the principal to protect this valuable resource. If the principal is an active supporter of the change effort, the teacher commitment is sustained.

Models of Change

There exists a variety of competing models for implementing change within school districts. Whether it is the continuous improvement methods, Concerns Based Adoption Model (Hall & Hord, 1987) Conceptual Change Model (Southerland, 2011), Participatory Development (Keefe, 2009) or Fullan’s (2009) core premises, each model involves people.

Lemke and Sabelli (2008) describe continuous improvement within systems as follows:

For reform efforts to be maximally adaptive to changing environmental conditions, an iterative process is needed in which plans are continuously modified in response to issues that only come to light once implementation has begun, or to the mere change of individuals in either the research or the implementation personnel. . . .Under these conditions, modeling of different “scheduling paths to innovation” may lead to a more integrated and sustainable organization that is resilient with respect to changing future conditions. (p. 13)

Concerns Based Adoption Model. Hall and Hord (1987) and Anderson’s (1997) application of the Concerns Based Adoption Model provides a lens that has held true over time and is repeatedly validated within the educational setting. Recently, Khopoli and O’Toole (2012) explored how districts recognize and meet the ever-changing concerns of the teachers involved and strive diligently to meet the needs of the project participants. Hall and Hord’s (1987) outline of the basic levels of participant engagement (awareness, informational, personal, management, consequences, collaboration and refocusing) provides a framework for developing the capacity of any given staff and ensuring long-term sustainability for any initiative. Blalock (2008) cites that “the CBAM model (Concerns Based Adoption Model) is widely accepted as a framework for assessing the change process” (p. 55). This model moves teachers through a series of concerns (personal, task and impact) where they move from a state of minimal concern regarding the change to a point where they are actively engaged in promoting the change. Hall and Hord (2011) define these stages as outlined on the following table:

Table 4. Concerns Based Adoption Model: Stages of Concern

Stage	Descriptor
Awareness	There is no awareness of any change taking place.
Informational	Individuals are seeking information about the changes.
Personal	Individuals question how the change will affect them personally.
Management	Individuals question how they will accomplish the change.
Consequence	Individuals question the effect of the change upon their students.
Collaboration	Individuals are concerned about relating what they are doing with what others are doing.
Refocusing	Individuals present ideas about the change that would work even better

The original CBAM was later revised to include levels of use and only five stages of concern: awareness, personal, management, impact, and collaboration (Blalock, 2008). According to Ellsworth (2000), CBAM recognizes that “the effective change facilitator [must] understand how his or her clients (e.g., teachers) perceive change and adjust what he or she does accordingly” (p. 46).

Conceptual Change Theory. Conceptual Change Theory suggests that teachers must have some degree of discontentment with their current teaching practices if they are to accept reform initiatives (Southerland, 2011). When this professional discontentment is accompanied by a sense of confidence in one’s ability to enact a new practice, change can occur. Southerland questions whether teachers in rural districts have “lower self-efficacy and greater dissatisfaction due to the limitations of their rural district” (p. 304). In essence, educators who are more confident in their abilities to actually implement a new initiative are

more receptive of that particular reform. This degree of confidence is hard to achieve when educators feel disenfranchised and isolated.

Fullan's Change Leadership Theory. The work of Fullan, Cuttress, and Kilcher (2009) describes the characteristics of change leadership that can yield the best results. The researchers contend that the initial teacher buy-in is not necessary for implementation of a specific innovation; however, specific factors must be addressed in order to increase the likelihood of success. With attention to these factors, educational leaders can lead their districts through change effectively. Lack of resources can be a challenge for rural leaders as they strive to provide the necessary structures for educational innovation.

Some change theorists insist that teacher “buy-in” is required prior to any change effort (Calabrese, 2003; Guskey, 1985). Guskey and others suggest that this buy-in evolves over time as teachers see the results of their efforts (Crandall, 1983; Guskey, 1985; Reeves, 2009). Adams (2007) argues that many of the policies and plans for reforms are adopted centrally rather than at the local level and few actually fulfill the expectations of those involved. Others maintain that change should be from the bottom up stating that grass roots efforts might be more successful (Lynch, 2012; Reeves, 2009).

Participatory Development. Borman and Timm (2009) describe participatory development as an “effective strategy to institute social change in Appalachian communities and in other school settings” (p. 169). Keefe (2008) explains this method as being respectful of the unique intricacies of Appalachian culture. Researchers must work diligently to learn local knowledge and develop community commitment. Researchers and participants are seen as equals where the researcher serves more as a facilitator of change rather than an observer or documenter of change (Keefe, 2008). The dynamics presented by interactions of cultural

elements within the society as whole becomes capacity for action. Keefe (2009) describes participatory development as:

the radical heterogeneity of experience, the existence of multiple paths toward development, the local community as the basis of the process involved, and people themselves as the only effective agency for changeParticipatory development begins with locally led development by and for Appalachian people and communities, and the narrative becomes one of local empowerment and cultural persistence. (p. 7)

Participatory development is particularly difficult in educational settings where reform is typically mandates from either state or national levels and exhibit implementation timelines that are not conducive to this model.

In examining each of these four change models, all include changes in the capacity of the educators involved and require a transformation in the culture of the school or district. This can be a monumental task in a rural Appalachian district that is characterized as having a strong attachment to its unique culture and a resistance to change.

Change in a Rural Setting

Educational leaders within the United States focus on maximizing the effectiveness of teachers and enhancing the skills and knowledge of students based upon urban structures (DeYoung & Theobald, 1991). Rural school districts are portrayed as being deficient and behind the times. *Rural* is seen as something to overcome in Howley's (1997) description of rural as an "impediment to school effectiveness, school excellence, systemic reform, economic development, and global economic dominion" (p. 132). It is important to note that the studies presented earlier in this review of the literature have focused on the urban,

national, or international perspective. Theobald (1991) declares that existing rural education research falls into three areas:

- studies that seek to address staffing, expenditure, or instructional problems directly related to decreasing enrollments;
- studies that contrast and compare rural with urban education to prove that rural schools can be viable; or
- studies that prescribe innovative strategies to combat decreasing enrollments. (p. 22)

Literature that specifically focuses on change processes within rural districts is limited at best. Although empirical research does exist on specific programs or methodologies, there is little research focused on the dynamics of reform within a rural setting-particularly rural districts within the Appalachian region.

Kushman and Yap's 1999 impact study does look at 33 rural school districts across the state of Mississippi as they worked to implement *Onward to Excellence* as a way to increase student achievement. While this is a study of rural areas, the focus of the study is on the effectiveness and implementation of a specific program rather than how reform occurs within a rural setting.

As Secretary of Education Arne Duncan's remarks made at the release of the "Pathways to Prosperity Report" (American Youth Policy Forum, 2010) underscore, the most alarming challenges plaguing urban school districts are also shared by rural school districts across the country. Across the United States, the demographics of what constitutes a "rural" school district vary with examples ranging from California to the geographically isolated and impoverished areas of Appalachia. Rural school districts have distinct challenges and limited resources with which to meet those challenges.

In order to understand the dynamics of a rural school district, one must first define a rural school district. A common definition – or more accurately, perception of “rural” is synonymous with “agricultural.” While this may have been true in the past, this association is becoming less valid. Coladarci (2007), Dobson and Dobson (1987), and DeYoung (1992) describe a variety of “rural” communities including “high growth,” “depressed,” “stable,” and “isolated.” Sherwood (2001, p. 3) outlines “poor rural” and “wealthy rural.” What is consistent is that each of the delineators affects school populations and the success potential of change within the district.

Seal (1995) identifies several characteristics that set rural schools in Appalachia apart from rural schools in other geographic regions. He outlines these characteristics as follows:

- Rural schools are more influenced by the economic and cultural outlooks of their communities than other schools.
- Rural schools reflect and share the economic and social stratification of their communities.
- Rural schools embody pride in values, including discipline and hard work.
- Rural schools serve as more than just classrooms, they are the cultural and social centers of small towns and rural life.
- Rural schools are often the major link between the community and the wider world. (p. 5)

These characteristics are evident within Alleghany County Schools and the impact of each is described within the interviews conducted for this study.

Rural barriers. Researchers such as Sherman (2011), Seltzer et al. (1995), and Williams and Nierengarten (2011) concur that there are specific barriers to reform efforts

within rural school districts, many of which apply to the school district at the heart of this research study. High poverty rates make rural districts particularly vulnerable to changes in the economy (Heenan et al., 2001). The small population size of many rural areas directly impact the capacity of a district to implement a reform effort in terms of competitiveness for funding opportunities, limited human resources to dedicate to projects, and isolation among staff members themselves. Scarcity of the physical resources needed to implement a specific reform effort significantly affects the capacity of rural school districts to engage in change efforts.

“Beyond issues of size and scarcity, geographic isolation poses constraints on transportation and communication. Access to goods, services, and professional development opportunities is limited by physical distance” (Queitzsch, Hahn & Northwest Regional Lab, 1995, p. 5). Isolation is defined differently from rurality in that it refers to the cost, frequency, and ease with which a school can access resources. This isolation significantly hinders access to professional development opportunities and collaboration across regions and even the state. DeYoung (1992) describes how the at-risk status of an isolated community is also enmeshed with a depressed economy and education reform is hindered significantly.

Jimerson (2005) examines the impact of No Child Left Behind upon children in rural school districts. This article specifically outlines ways that rural school districts are disenfranchised by federal mandates that leave little room for the local control and independent culture so predominant in rural school systems. Williams and Nierengarten (2011) expand upon the pleas by rural administrators for consideration of their unique challenges by presenting specific recommendations on the cusp of the reauthorization of

ESEA. Williams and Nierengarten present the unique challenges of rural districts in meeting the expectations of the current NCLB Act and the proposed components of ESEA. Their description of the effect of poverty, distance, and lack of financial supports upon a district's ability to meet the requirements of No Child Left Behind outlines the perceived discrimination against a large segment of the population based upon where they live.

“School improvement, particularly in rural areas, is complex and intertwined with many factors, the least of which is the nature of the rural community” (Carlson, 2000, p.32).

Fullan, Cuttress, and Kilcher (2009) argue that change must occur at all levels. Reform cannot be just at the individual level but within the school and community as well as the district and state. Contexts and culture must be changed in addition to individuals. This is particularly difficult for rural communities especially those in the Appalachian mountain region where cultural identity and beliefs are held strongly. Kushman et. al (1999) state,

Reform efforts in small rural communities require an inside-out approach in which educators must first develop trusting relationships with the community . . . by working to develop an ownership for school reform that is embedded in the community rather than with school personnel who constantly come and go. (p. 6)

This need to elicit community buy-in prior to engaging in a new initiative as well as the need to build trusting relationships with the community is described in the interviews that are integral to this study.

Dynamics within Appalachia

Howley, Theobald, and Howley (2005) argue that “the *rural* in rural is not most significantly the boundary around it, but the meanings inherent in rural lives, wherever lived”

(p.2). This is particularly true of the Appalachian region (Cook, 2009; Glass, 2010; Howley et al., 2005; Keefe, 2008; and Osborne, 2007).

The Appalachian region gets its name from the mountain range that serves as its backbone. “The region consists of 406 counties in thirteen states and is also defined as a federally funded region established by the Appalachian Research Commission” (Glass, 2010, p. 154). Keefe (2009) goes further to describe the region as consisting of four distinct sub regions: the Eastern Piedmont, the Blue Ridge Mountains, the Greater Appalachian Valley, and the Alleghany-Cumberland Plateau. The county that serves as the focus for this study is located within the Blue Ridge Mountains of the Appalachian Region.

Personal dynamics. The Appalachian region is widely associated with poverty, backwards people, illegal activity, feuds, and a lack of modernity (Keefe, 2008; Osborne, 2007). Howley et al. (2005) describe a “norm that is vilified and romanticized, and rarely understood or authentically appreciated by outsiders” (p. 8). An understanding of this personal norm and the dynamics at play will serve to enhance rural education research particularly research focused within the Appalachian mountain region.

Personal issues interplay with reform efforts on the historical, familial, and political stage. Personal histories often determine contemporary mindsets when change is proposed. For many in rural communities, their personal educational histories – good or bad – are often rewritten and relived when confronting change that directly affects issues of importance to the citizenry. Heenan et al. (2001) accurately describe the familial component of rural culture. Because people in isolated rural communities tend to stay in the community, marry, and create generations within the community, many people are related to one another. Heenan, et al. goes on to describe that this “extended family” can either support or interfere

with reform efforts promoted within the community. As rural people-particularly isolated rural people-are confronted with scarcity of resources and imposed government reforms, they tend to become more resistant to change of any type. School administrators must navigate this treacherous landscape by considering the needs of children, political mandates, the needs of teachers, and the societal needs of their community at large.

Economic dynamics. Keefe (2009) compares economic development in Appalachia to that of countries within the Third World. History has shown that some of the worst pockets of poverty have been found in the rural mountains of Appalachia. The degree of poverty within this region received national attention in the 1960's as John F. Kennedy campaigned in Appalachia and later in 1964 as President Lyndon Johnson declared war on poverty.

Historically the mountains of Appalachia have remained isolated and agrarian in nature. The mountains provided refuge for freedmen, escaped slaves prior to the Civil War, and served as a route for the Underground Railroad. Slavery within the mountains was limited due to the absence of a plantation system. Farms were relatively small and family members provided the source of labor rather than slaves or hired employees. Because farms were small, there was no need for a large labor force (Cook, 2009). The economic focus of the region consisted of individualized strategies to meet the needs of the family rather than to make profits or become independently wealthy. The perception of the families was not that they were poor, but rather that they should be held in high esteem because they were able to "make do" (Bartlett & Boyer, 2009; Keefe, 2009). Keefe (2009) goes on to describe the economy of the region by stating:

Local families were largely sufficient before World War II, for the people raised most of their food, made most of their own clothes, and needed very little cash. This was regarded as having been a good life but a hard one. (p. 7)

With the New Deal of the 1930's, modern development attempts surfaced in the southern Appalachian region. The focus of many of these attempts consisted of a "campaign to change the traditional backward culture of southern mountaineers" (Keefe, 2009, p. 5). The development efforts of the Tennessee Valley Authority, Civilian Conservation Corp, and National Park System brought new opportunities for capitalist ventures. Industrialization began to occur where railroads were constructed. Natural resources such as coal and timber were harvested. Individuals from outside the rural mountain culture began to purchase land and mineral rights at bargain prices. The number of family farms decreased. The jobs that were created were dangerous, low skilled, and low paid. Many farmers were forced to sell their land in order to pay rising taxes and to provide for their family. Osborne (2007) states that "the remaining families created a greater dependency on outside industries for their income, and when those failed, so did the local families" (p. 3). Keefe (2009) concurs, explaining, "Modernization and industrialization in Appalachia did not result in a rising standard of living but instead produced one of the highest rates of poverty in the country (p. 4).

Current conditions in Appalachia have changed little. The focus of economic development continues to be that of outsiders coming into the area. Peine and Schafft (2012) describe towns in which citizens have worked to develop heritage tourism as a means of economic development. The tourism industry capitalizes upon many of the arts and crafts of the region including but not limited to quilting, farming, spinning, storytelling, making

moonshine, and music. County governments seek to give industrial organizations tax breaks in order to entice their leaders to develop companies within the Appalachian region, but as the tax breaks expire, the businesses move elsewhere leaving a wake of unemployment and poverty in its path. Theobald and Alsmeyer (1995), as well as Chesky (2012), describe an atmosphere where “agrarian communities, once proud and self-contained, are being transformed into places where people only live, they work, shop, and obtain services elsewhere” (Chesky, 2012, p. 1). In essence, rather than current economic development activities correcting the problem of Appalachian rural poverty, these attempts have created a scenario where the gap between the rich and the poor is even more pronounced (Keefe, 2009).

This portrait of Appalachian economic dynamics is consistent with what exists within Alleghany County. The county has historically been a community that was based upon subsistence agriculture. The wealth that exists in the county exists in the hands of very few citizens. Many of these citizens have retired and moved from larger cities. While the county has moved away from its agricultural roots, it remains a community based upon subsistence employment. Farms remain small and produce beef cattle; very few dairies continue to exist. The Kraft Cheese Factory has been closed for decades. The county was once a source of tobacco for cigarette companies across the state. Most tobacco bases have been bought out, while few continue to exist. The county economy now has an agricultural base tied to Christmas trees and pumpkins. Few families continue to garden and preserve their food for use throughout the year. As the cost of yarn and fabric has increased, the likelihood of families to produce their own clothing has decreased. Spinning, knitting, sewing, and quilting are now treasured as art forms rather than as a means to providing for one’s own

family. Geologically, the county has little to offer in terms of coal or mineral potential. Timber harvesting has been mediocre, and granite sources are found only in sparse amounts along the edge of the county borders.

The railroad never came to Alleghany County. Later efforts to bring Interstate 77 into the county were defeated by lack of community support at the time. The lack of this infrastructure further isolated Alleghany County from its neighbors and diverted valuable economic resources elsewhere. United States Representative Robert Doughton was instrumental in not only getting the Blue Ridge Parkway diverted into the county but also in having the county as its starting point (Alleghany Chamber of Commerce, 2013). This endeavor, believed by many to be a back door concession for an affirmative vote on Social Security, allowed many of the county's citizens to work on building the parkway as part of the Civilian Conservation Corp. Industries such as Troutman, Sara Lee, Hanes, and Bristol Compressors left the area soon after NAFTA was put in place and tax incentives expired. The county leaders have had little success with recruiting new factories into the area and many of the buildings that would house such industry have been repurposed.

Although the educational focus has encompassed STEM education, Alleghany County does not have the economic catalysts needed to provide actual STEM jobs for the youngest citizens. The economy has historically been based upon agriculture and manufacturing. Both of these industries have died out as the difficulty of transporting goods and services along narrow, winding mountain roads have increasingly become cost prohibitive. The county currently has two open facilities that could be used to house STEM-related industries. This will not occur as one is being retrofitted into a cooler for Christmas trees and wreaths and will only provide jobs for a typically low-wage migrant work force.

The second facility is in the process of being developed into an office complex that does not have any prospects for tenancy. Small service-oriented businesses are the norm within the county, and many of those existing are struggling to stay in business. Efforts at new job creation have seen limited success. The lack of access to institutions of higher education further limits the ability of developing a skilled workforce to remain in the county.

There are aspects of heritage tourism within the county. County fairs, quilt shows, choose and cut festivals, fiddler's conventions, and ridge runs are common occurrences within the community. Sustained activity is, however, limited with more guests frequenting the same events in neighboring counties.

The phenomenon described by Theobald and Alsmeyer (1995) and Chesky (2012) where people live within the county, yet work and shop elsewhere, is true for Alleghany County. Families tend to seek medical services in neighboring counties. In order to access commonly recognized resources for goods and services, one is required to drive down the mountain. There is little demand for high skilled, high paying jobs within the district, so one must also leave in order to work. This phenomenon further exacerbates the struggles for economic development within the county.

Alleghany County is much like the rural mountain communities described by Keefe (2009):

Rural mountain communities continue to deal with inadequate water supply, sewage disposal facilities, and health care facilities. Factory-flight and the new tourism economy with its low-paying service industry jobs, now define regional economic underdevelopment. Despite infrastructure development and regional, state and federal monies devoted to expanding human resources, Appalachian communities still

struggle with problems largely defined and “solutions” provided by non-Appalachian individuals and agencies. (p. 6)

Cultural dynamics. One can divide cultural influences into two distinct categories-- school culture and community culture. Both have distinct influences upon educational reform efforts and are worthy of examination. In comments made to students at the Appalachian State University Doctoral Seminar, both Bill Harrison, Chairman of the North Carolina State Board of Education, and Judith Rizzo, Executive Director of the James B. Hunt, Jr. Institute for Educational Leadership and Policy, addressed changes within the school culture by challenging aspiring educational leaders to become agents of “disruptive change” (Harrison, 2012).

At the same symposium, Rizzo (2012) impressed upon the group of students, college faculty, and political leaders that school systems had become quite successful at weathering changes within the political and economic arenas by adapting reform efforts to fit within their existing constructs. This concept is supported by the arguments of Waks who asserts, “Organizations respond to external forces by converting changes meant to be fundamental into minor, or incremental changes compatible with existing organizational structures” (Waks, 2007, p. 2). Rizzo stressed that “serial beginnings,” where one program is implemented after another so that educational leaders can find the proverbial silver bullet, creates change fatigue among staff members and wastes valuable resources. Rizzo challenged the audience of educators to move toward a more solid implementation of their reform efforts by engaging in a process of continuous improvement rather than implementing one new reform initiative after another. This framework provides the lens with which to analyze this study.

Appalachian cultures share characteristics with southern culture and rural lifestyles, but there are some distinct differences. Common attributes include a rugged sense of individualism, importance of the family, a strong reliance upon one's faith and religion, and a strong connection to the mountains as a sense of place (Bartlett & Boyer, 2009; Keefe, 2009). People of Appalachia have a strong connection to the mountains. For many the mountains are a symbol of strength, family, and history. Self-sufficiency is glorified. Social welfare and charity are resisted (Barlett & Boyer, 2009; Keefe, 2009). People see the community as a whole and value work toward the common good. Self-centeredness is not a character trait that is respected (Howley & Howley, 1999).

The Appalachian culture is unique in a variety of folkways including speech, rituals, perceptions of power and freedom, and even within magic and religion. The southern Appalachian region has a strong crafts tradition with unique styles for art that is considered functional first and artistic second (Barlett & Boyer, 2009; Keefe, 2009). Much of this art is derived from necessity where people made their own quilts for warmth, sheared sheep, and spun yarn for knitting, refined beeswax for candles, and caned chairs out of existing materials.

These folkways are evident within life in Alleghany County. Attachment to place is an important part of the citizens' identity. In a 1999 study of Alleghany County completed by Susan Keefe and Elvin Hatch (2000), "eighty nine percent of the county's respondents say they feel strongly attached to the mountains, and 53% say they would never move" (p. 9). Family functions are at the core of life in the county with the local parks booked throughout the summer for family reunions. The handcraft skills of quilting and spinning are still treasured but serve more of an artistic purpose rather than one of utility. The local farmers

market routinely displays an equal amount of craft projects like candles and floral designs in relation to actual produce. One can obtain a hand-caned chair from a variety of personalities within the county and there are a growing number of potters and woodworkers.

Keefe and Hatch's 1999 study of Alleghany County also shows "an ambivalence about social and economic change within the county based upon a perception that these changes are undermining the local culture and county resident's sense of common purpose" (Keefe & Hatch, 2000, p. 10). The researchers also assert that Alleghany County residents hold onto their roots more strongly than other counties and often present concerns when a change effort is being considered. When proposing change initiatives, Keefe and Hatch (2000) found that only 25% of people support hiring an outside consultant, while 54% is opposed. People simply want decisions to be made by other locals rather than outsiders.

Religious dynamics. Bartlett and Boyer (2009) and Keefe (2009) describe the evolution of religion throughout the Appalachian culture. Scots-Irish immigrants settled within the Appalachian region prior to the American Revolution and brought with them their zest for religious freedom and Calvinist ideals. They were eventually joined by "Irish Protestants who were also seeking religious and political freedom" (Keefe, 2009, p. 116).

Keefe (2009) describes specific intricacies of Appalachian religion based upon a conservative interpretation of the Bible. Prayer is an integral part of everyday life where even civic meetings began with oral Christian prayer up until a Supreme Court ruling declared the practice unconstitutional. Church buildings within the Appalachian region are simple and community preachers who have little or no seminary training lead services. There are a few mainline Southern Baptist and United Methodist Churches within Appalachian communities but many churches are independent and unaffiliated. A few others

are drawn together into associations. Decorations at church cemeteries are routine throughout the summer months with many families following a circuit of events to ensure that each family member's grave is "properly decorated" (Bartlett & Boyer, 2009). Creek baptisms and foot washings are commonplace.

The unique features presented by Keefe et al. (2009) outline the missionary movements designed to church those within Appalachian communities. These efforts promoted the development of schools and churches. As Fraley (2011) describes:

The missionaries brought with them not only attitudes toward Appalachian religion, but more generally toward the moral values of the region. The missionaries saw a divide not just in the religious traditions but also in the very ways of living in the Appalachians when they were compared to urban Americans. The people of the region were simply backward. (p. 30)

Political dynamics. Educational reform in the United States has been debated most vocally since the publication of "A Nation at Risk" in April of 1983 (National Commission on Education, 1983). This report presented a comprehensive identification of problems in public education and posed a variety of solutions for implementation. The report addressed concerns about the rigor of curriculum and revised graduation requirements.

Recommendations also included added emphasis on increasing teacher quality, adequate fiscal support, leadership, and increased instructional accountability. The debate that continues does not concentrate on singular locations across the country but encompasses the nation as a whole and expands past its borders.

Negotiating changing attitudes of community leaders presents a distinct challenge to educational reform. Lamkin (2006) describes the challenges presented to school leaders –

particularly those in rural settings who develop and maintain relationships with elected officials at both the local and state levels. Lamkin states, “Many rural superintendents discuss the challenge of district politics and board relations, with some talk about the nature of the boards, increased shared decision-making, and the demands of continuous communication” (p.21).

“Mountaineers have a tradition of resisting government authority” (Bartlett & Boyer, 2009, p. 125). This attitude of sovereignty has evolved over time with its beginnings of political and religious oppression in Europe that eventually led to a mass immigration to the United States (Keefe, 2009; Peine & Schafft, 2012). These feelings were exacerbated by the taxation and criminalization of moonshine – a situation in which overnight previously law-abiding citizens became criminals. Historically, the conservative attitudes of those within the region valued an ethic of making do with what one has rather than depending upon others. This attention to taking care of oneself and one’s relatives was a great source of social honor (Hatch, 2008).

Local support is imperative for education reform. Seal and Harmon (1995, p.3) state, “the need for constant educational reform is heralded by national and state policymakers but viewed dimly by local residents.” Anderson (1993) elaborates upon elements of reform by adding components that garner public and political support as a means for allocating capital and psychological resources and minimizing resistance to the new vision. The analysis of public and political opinion is further examined by Gurevich (2011) who completed an analysis of public opinion in order to focus on the conditions necessary for reform success and proposed ways to counteract public misunderstandings that eventually undermine efforts at reform. The work of Calabrese (2003) presents the variety of paradigms that affect change

in personal and collective behaviors. Calabrese demonstrates change as a symbiotic relationship between the educational organization, the teachers involved, and external constituents. Calabrese asserts that the first level of implementing sustainable, transformational change is to assess the relationships present within the school, between the school and the world outside its walls. Calabrese presents the argument that “quality without a cooperative, synergistic relationship within the school community and between the school community and external constituents is an illusion” (Calabrese, 2003, p. 13). The acts of data gathering and negotiating assist administrators as they lay the foundation for eliciting the ever-important community commitment necessary for institutional change. Masumoto and Brown-Welty (2009) further assess the impact of multiple formal and informal school-community linkages that can provide valuable and needed resources for educational institutions. The negotiations and development of community linkages can play a significant role in determining the success or failure of the endeavor. Ensuring that a reform effort has engaged in societal support is critical. Reform efforts must work within while striving to expand the constructs of the traditions in place in order to be successful.

Political dynamics are starting to change across the Appalachian region, yet family ties to the community still exist. Chesky (2012) states that:

Many residents remain opposed to government intervention – especially zoning, and are rapidly aging. Newcomers, conversely, are politically liberal, often secular, have few – if any- family ties to the community, are employed in high wage occupations outside of the community, and are generally younger. These socioeconomic differences alone are enough to create a gap between the two groups . . . and many studies have concluded that political and value differences between old-timers and

newcomers are due to socioeconomic differences including age, education, occupation, and land ownership. (p. 6)

Keefe and Hatch's (2000) study shows a displeasure with the feelings of resident's inclusion in government decisions. "71% believe that the government in Washington doesn't care what people like me think, and 49% express the view that they are left out of the decisions being made in Alleghany County" (p. 6). These viewpoints are critical for educational leaders in small, rural settings. Williams and Nierengarten (2011) state that:

School administrators are often placed at the demographic, geographic, financial, and perhaps even philosophic intersection of a rural community. Their decisions must consider the needs of schoolchildren and the political pressures of mandates and legislation. It is the role of the principal and superintendents to consider the needs of both internal and external constituents of the rural communities' schools. (p.16)

This is no less true for rural Appalachian communities where a political and educational leader may very well be a near relative. This familiarity between school and community leaders can at times be a help and at others be a hindrance (Jennings, 1999). Personal relationships are key and as Glass (2010) states, "Leadership in Appalachia requires taking time to build a rapport, including small talk or silence for a 'spell'" (p. 155).

Social dynamics. "Community in Appalachia is anchored on kinship which provides the real social networks and the cultural values that bind people into community" (Bartlett and Boyer, 2009, p. 127). The family is the primary social unit, and it is around this core that other social relations are developed. Self-sufficiency is expected although neighbors do help neighbors in time of need knowing that the favor will be returned one day. Conflict is avoided and aggressiveness is frowned upon. Bartlett and Boyer (2009) explain that people

are generally self-effacing and do value humility – even in public leaders. Country stores and cafes are common in mountain communities. People meet one another in these establishments, greet one another by name, and proceed to have in-depth discussions about the news of the day.

Appalachian people draw their identity from the mountains and their deep familial roots within those mountains. Many who move away from the mountains return because of their connections to the place as well as the people (Bartlett & Boyer, 2009). There is often a perception of “them” and “us” in terms of newcomers.

Those living in Appalachian communities often feel threatened “by the in-migration of newcomers with different values, a different relationship to the natural environment, and less attachment to people and place. Second homes and new “gated communities” are becoming far more common in the southern mountains. Seasonal residents may not be local voters, but they can easily overwhelm small mountain communities and change the character of community life. (Keefe, 2009, p. 25)

These dynamics are true of Alleghany County, which serves as the setting for the research. Family ties are strong with many families gathering cousins, nieces, and nephews together each Sunday for “dinner after church.” People strive to understand the family connections as a first step toward getting to know someone. The purchase of second homes has declined due to recent downturns in the economy, but the wealthier population of “flatlanders” has established communities on the edges of the county. These developments remain somewhat separate from the everyday activities within the county. Most purchase their goods and services off the mountain before “coming up for the weekend.”

Residents of Alleghany County take care of each other. Each year the community raises scholarship funds for each graduating senior to receive a substantial scholarship to attend a two-year or four-year institution. Benefit suppers are held routinely to meet the needs of those who may have experienced a crisis, sudden death, or long-term illness. The local Mustard Seed Café, Brown's Restaurant, or JB's Restaurant is routinely packed with local residents who meet and greet one another, enjoy a meal, and proceed to plan an activity or try to solve a current problem. The Keefe and Hatch (2000) survey substantiates these observations of a strong sense of local identity and shared county pride.

Educational dynamics. Schools within Appalachia were traditionally seen as settlement schools designed to support the local culture rather than other educational interests. Schools influenced by the involvement of missionaries to the region were seen as a way to promote religious beliefs and were typically seen as charity institutions (DeYoung & Theobald, 1991; Keefe, Bartlett & Boyer, 2009). "Throughout most of the nineteenth century, schoolmen in small local districts had wide-ranging powers" (DeYoung & Theobald, 1991, p.4). Local communities resisted urban models of education that were migrating from cities as they were historically perceived to challenge the regional culture and values. Communities have held to a strong belief that the local community should govern local schools. State and federally imposed reform efforts have been received with suspicion and reluctance (DeYoung & Theobald, 1991).

In March of 2013, Fullan and Hargreaves presented at the Association of Supervisors of Curriculum Development (ASCD) Annual Conference in Chicago, IL. In this breakout session, Fullan and Hargreaves outlined what they called "the change wars" and concerns with the business capital view that is driving educational reform currently. Fullan stated that

the political theory which views education through the business lens is exactly opposite of what is needed to exact long-lasting, sustainable educational improvement. The belief that “schools are meant to serve the economy, a dangerous idea in the rural community where teachers find themselves training children for jobs that don’t exist locally” (Salinas, 2004, p.2) is particularly true for schools within the Appalachian region and Alleghany County specifically.

Many contradictions exist in Alleghany County. There exist profound examples where the goals of the educational system are at cross purposes with the needs and desires of the community at large. One can see three distinct areas of incongruence within efforts to transform education in Alleghany County. These areas include attitudes, actions, and resources. Each is equally profound and equally important.

Perhaps the most recognizable instance of school and community being at cross-purposes exists in the perception in many rural communities that the school system is the perpetrator of the community’s demise. Whether one believes that “brain drain” – the outward migration of the best and brightest youth in a community toward college and higher paying careers – is indeed a reality, the mission of any educational system is perceived to undermine the efforts of the community to promote economic development. As educators strive to develop highly educated youth who are college and/or career ready, they know that, in all likelihood, they are grooming students to leave the community and many never return. In a Community Assistance Initiative meeting held in October of 2011, Alleghany County community members stated concerns that only the less educated graduates end up staying in the community. Whether one agrees with this argument, the perception plays itself out in the static demographics of the community (US Census Bureau, 2010).

The attitudes expressed in the community and within the board of education are in direct conflict with the goals of current initiatives. Leaders within an educational system routinely advocate for opportunities to develop youth into the workforce of the future. Educators often use as an argument the need for the skills that students will need to be competitive with China. Educators stress the need to prepare students for a global workforce while others want the focus to be more local. Educational leaders are promoting forward thinking and creativity while others actively promote the “it was good enough for me, so it’s good enough for my kid” mentality.

There exists in Alleghany County a prevalent attitude that “all the smart kids leave.” There is some fact in this assertion as the most recent Census reports shows that 68.4% of the county’s population holds a high school diploma and only 16.5% of the population holds a bachelor’s degree or higher (U.S. Census Quickfacts, 2010). Alleghany County is a closed community. The same recent Census report shows that the population of the county has only changed by 4.5% over the past ten years – well below the state and national rates. These statistics are compounded by the fact that 19.3% of the population is living below the poverty level and over 20% of the county’s population is over the age of 65. There is irrefutable evidence of the young leaving the county and searching to build lives elsewhere. This outward migration of a youthful, skilled labor force has drastic impact upon the economic potential of Alleghany County.

Deliberate actions by well-meaning and well informed citizens are juxtaposed to the goal of “developing” Alleghany County. As school leaders promote the college and career readiness of students by increasing the rigor of course offerings, increasing the pass rate in higher level mathematics and science classes, and promoting the skills needed for the highest

growing career fields, educators are indeed giving youth the skills they will need to leave. This exodus is further promoted by a highly active and efficient educational foundation that ensures every high school graduate receives scholarship monies to an institute of their choosing. Last year the graduating class of 106 students was awarded over \$900,000 in scholarships to a variety of institutions (Ketchum, 2013, 7A). As community members “pay the way” for students to leave, they realize that many will not return and will not contribute to the economic development of the county.

Further discourse is found in observations that school leaders are focusing on STEM education, yet there exist limited opportunities for STEM employment within the community. Possibilities exist at the local community hospital and within one of three doctors’ offices within the community. The local hospital is struggling to stay open and has great difficulty recruiting physicians. With the closure of the hospital a continuing concern, the work force remains sparse, and those employed often leave for better opportunities elsewhere.

While efforts to prepare students for the careers that have yet to be invented are indeed honorable, Alleghany County simply does not have the capacity to provide employment within the borders of the county. While actions promote the competitive skill sets that employers state they need, Alleghany County falls short in the hiring capacity of the employers that historically exist. There are distinct inconsistencies within resident attitudes that waver between the desire to give students “wings” and the need to keep them tied to the county.

Purpose Statement

The purpose of this study is to explore and describe how educators in a rural Appalachian school district have experienced efforts of continuous systemic improvement. The study provides a description of how these educators across the district manage continuous improvement efforts while coping with the cultural and social aspects involved.

Conceptual Framework

Schram (2006) describes the presentation of the contextual framework as a means to presenting the argument, structure, and relevance for the proposed inquiry into the topic or issue being addressed. This project is designed to provide an in-depth view of a specific instance of school improvement, making a case study an appropriate methodological stance for the research.

School improvement is a complex process with many dimensions. Of these, one cannot discount the human dimension of change. Schmidt (2004) states that:

Success with the implementation of reform depends on the people engaged. The process of reform often leaves us with more questions than answers, questions that are determined by the varying contexts of large-scale reform. Given the nature of education and reform, there are also questions of power, policy, and responsibility at stake, as well as a host of human factors including emotions, values, and pragmatism. In short, the process of examining reforms at work is both a complex and a messy business. The use of multiple perspectives helps to capture aspects of this complexity. (p.1)

Sarafidou and Nikolaidis (2009) concur that “attempts at school improvement occur in human systems, which already have beliefs and expectations, norms and values, functioning

both at the individual and at the collective level” (p. 432). A thorough examination of this specific case requires gleaning the perspectives of the participants involved. This case study is grounded in the literature describing the developmental stages of the Concerns Based Adoption Model (Blalock, 2008; Horsley & Loucks-Horsley, 1998), elements of continuous improvement (Lemke & Sabelli, 2008), and the dynamics outlined by Keefe (2009) as typical of Appalachian communities.

Chapter Three: Research Methodology

Purpose

The purpose of research should determine the research methodology employed. The purpose of this research study is to explore and describe how educators (teachers, assistants, and administrators) experience efforts at continuous systemic improvement implemented within their district. The goal specific to this study is to give voice to the educators who have experienced a series of initiatives designed to improve educational outcomes within Alleghany County Schools. Educator perceptions about the improvement efforts within the district are important to capture as a critical element in sustained improvement.

Research Questions

How do educators within a rural Appalachian school district specifically, Alleghany County, NC experience continuous systemic improvement? In this qualitative research study, eleven district educators in a rural mountain school district in North Carolina were interviewed in order to glean perspectives related to district-wide reform efforts. This description of educator experiences was built by exploring the following questions:

1. What are the educators' views about the continuous systemic improvement efforts implemented by the school district?
2. What do the educators involved perceive as the external and internal factors influencing the improvement efforts of the school district?
3. In what ways does collaboration and relationships with colleagues affect improvement efforts?

4. How do community and cultural factors affect participants in the improvement process?
5. How do educators see their role concerning the continuous improvement efforts within the system?

Research Paradigm.

In education, as in science, individuals have the need to label something as “this” or “that.” Labels are comforting as they provide a framework within which to work. Labels allow educators to define things and to be prescriptive. (“He is LD in reading, so we need to do . . .”) Labels allow educators to justify what is being done. (“We are a School of Distinction, so we are doing the right things for kids.”) What can be forgotten is that education involves working with people. There are many variables that cannot be manipulated and that educators should not manipulate. Rather than focus on any one approach to research, the ability to move between the different views of research allows educators to accomplish the very best for their students. There are times when a purely positivist approach is necessary. In other situations, educators need to view things through the critical lens and others require a post-modernist approach. For some issues, a variety of lenses are needed in order to answer fundamental questions. In the end, the question can be reduced to “What do we need to know and why?” For this study, I sought to know how improvement efforts have affected the adults involved in the process of continual systemic improvement. By knowing how the variety of experiences has shaped the outcomes, educators can then determine which interventions should be either embraced or avoided in the future.

Conceptual Framework

This case study is grounded in the literature surrounding the identified stages of the Concerns Based Adoption Model, elements of continuous improvement, and dynamics specific to Appalachia. The Concerns Based Adoption Model is widely accepted as a means to assess change within individuals. The model captures an individual's evolution from self-oriented questions such as "How will this affect me?" through task-oriented questions like "How will I manage this?" to the final stage of impact where educator concerns are focused on "How will this help my students?" I use the case study methodology to describe and analyze teacher perceptions regarding educational improvement efforts in the district in which they serve.

The literature review that accompanies this study shows that attempts to improve education can be perilous and constitute a deeply personal endeavor. Much of the research that exists encompasses ways to enhance the success of any undertaking by addressing the human elements involved. As Jerald (2005) states, "maintaining an improvement effort requires keeping a sharp eye on how the process is affecting staff members and students; keeping a constant lookout for warning signs of obstacles that might threaten the effort; and keeping a very open mind to how challenges can arise from even the most unlikely places" (p. 2). The interaction of each element involved in the improvement effort including the human element determines the progression of the district improvement efforts. Lemke and Sabelli (2008) expand this concept by stating that "adaptation of models for system reform to local conditions matters more than efforts to replicate successes elsewhere without extensive knowledge of how the systemic variables differ between environments" (p. 12). In other words, the potential for success for any system reform effort will increase if the model is also

customized to the local culture. By gleaning teacher perceptions regarding improvement efforts, one moves from the assumption that dynamic systems can be controlled to the understanding that dynamic systems can merely be influenced. Sustained improvement is best achieved when addressing levels of concern exhibited by the individuals involved while giving them the freedom to control implementation in a culturally relevant way. This case study is designed to capture and examine the perspectives of educators involved in a systemic reform effort within a rural culture.

Research Design

Maxwell (2005) states that there are five basic goals to qualitative research: understanding meaning, understanding context, identifying unanticipated phenomena, understanding processes, and developing causal explanations. This qualitative study is designed specifically to understand the meanings that individuals within Alleghany County Schools assign to their experiences as educators engaged in continuous improvement. The study is designed to understand the context within which those improvement efforts have occurred and in doing so, identified unanticipated phenomena such as community perceptions regarding “brain drain,” innovation fatigue and the need for authentic collaboration. According to Shank (2002), we use a case study to examine the details of interactions within their context. Schneider (2013) describes a case study as a body of research which:

- Concentrates on one thing (person, group, institution, phenomenon, period of time, etc.)
- Looks at subjects from various angles (or perspectives)
- Gets close to reality

- Offers depth and specificity, and
- Provides a deep understanding (p. 6).

Denzin and Lincoln (2000) describe the case study as a means to “describe the case in sufficient descriptive narrative so that readers can vicariously experience these happenings and draw conclusions which may differ from those of the researchers” (p. 439). This case study encompasses the nuances of qualitative research and specifically, case studies through the examination the interactions and perceptions of rural educators in the same district facing the challenges of educational reform and improvement efforts. In this study, I attempt to give voice to the educators who have encountered educational improvement within the rural, geographically isolated, and high poverty district presented. Taylor and Bogdan (1994) state that a case study should have potential for offering insight that may be useful in understanding other similar cases. This case study examines interactions through the lens of rural culture, making it relevant to the sixteen states with high populations of rural students (Rural School Community Trust, 2012), many along the Appalachian mountain chain.

This interpretive case study is bound within time by exploring the change dynamics that have occurred within the district over the past seven years. The study seeks to understand the dynamics of continuous improvement within the district by examining the meanings that have been assigned to the process by the educators who have lived it. The research project took place over a period of several months. This period allowed time for participants to take part in a questionnaire-based survey, for data to be collected through semi-structured interviews, and for documents to be thoroughly reviewed. Survey responses were used to aid in the selection of participants for the interview process and to guide the development of semi-structured interview questions. Survey responses were also used to provide a rich

description of the perspectives held by educators within the system. Interviews were then utilized to add depth to the survey responses, lending a deeper and more nuanced set of explanations of the prevailing dynamics related to continuous improvement activities within the district. Transcripts and documents were coded and analyzed for prevalent themes. Coding was conducted by using an open, theoretical, and selective coding processes. While the results of the research are not necessarily generalizable, aspects could be transferrable to other similar districts.

Role of the researcher and ethical considerations. The role of the researcher in this case study is that of active participant. This research study examines work that is of particular importance to me as the Director of Student Services for the district examined. I have taught in the schools that were observed and worked with the teachers who were surveyed and interviewed. My children sit in the classrooms affected by the district efforts. Each of these relationships created an opportunity for researcher bias.

While this study can celebrate the successes of the efforts within the school district, much can be learned from successful practices within school settings as opposed to deficit-based improvement models where a system identifies a problem and tests a hypothesis (Schechter, 2011). My personal experience within the district provided a vantage point necessary to accomplish the tasks that could not be replicated or substituted by someone outside of the district. As an active participant in all that occurred with reform in the district, researcher attempts to mitigate the threats to validity and possibilities for biases were necessary.

Validity and trustworthiness. Integrity and credibility are of particular importance when conducting a case study of a small rural system where everyone is known and relationships are at the forefront of community existence.

This case study presented three distinct threats to the integrity, validity, and trustworthiness of the study. Those threats involved the role of the researcher as an active participant, researcher bias, and concerns of informed consent and confidentiality.

Schram (2006) defines the researcher's role as a participant because of presence. One could anticipate that the collegial relationship between the researcher and the selected participants would set up a situation where people will report what they think the researcher would want to hear.

Regardless of whether the technique is perceived as being trite, triangulation and member checks were both valid and appropriate to address the validity concerns that accompany being an active participant. Shank (2002) describes the value of triangulation in stating:

Triangulation is the process of converging on a particular finding by using different sorts of data and data-gathering strategies. Each set of data or strategy, on its own, might not be strong enough to support the finding. When these different 'strands' are taken together, though, there is stronger evidence for the finding. (p.134)

Reviews of the responses to a variety of data sources (the survey constructed for this project, the unpublished HCCOG and Breaking Ranks studies conducted in 2013 and the Sanchez Study completed in 2007 allowed me to not only cross-validate information between surveys but also to validate responses within the interviews. Using a variety of data sources gave a deeper and more detailed representation of what was actually occurring within the district.

Taping and then transcribing interviews was of great value in the research process. Utilizing an approach that utilized the taping and later transcription of interviews allowed me to enjoy a deeper dialogue centering on the questions at hand rather than concentrating on trying to write as quickly as the interviewee spoke. Presenting a random sampling of interviews to a member of the committee for verification also assisted in controlling bias. Members of the dissertation committee were given access to the secure platform that housed the audio recordings of participant interviews and the accompanying transcriptions. This allowed committee members the opportunity to verify the transcription of a random sampling of text to ensure accuracy. A member of the committee was also able to code a sample of transcripts for comparison, further enhancing reliability and validity. This comprehensive process addressed validity concerns within the dissertation but also validated the perceptions of trust between myself and colleagues.

Controls of bias. Any time the researcher is involved as an active participant, bias is a concern. Schram (2006) explains this concept of “engaged subjectivity.” There is an inherent risk that the researcher will not be able to monitor personal sensibilities within the topic of research. Fortunately, Maxwell (2005) stresses that, while these concerns need to be addressed, they should not be a critical area of concern in qualitative research. In this case study, I needed to monitor personal biases to ensure that I did not impede the accurate telling of educator’s perspectives. Schram portrays this as a critical tool to deepening the quality of the research. He proposes that when a researcher deliberately recognizes and monitors their own biases, the result can be deeper questioning and a reexamination of basic assumptions. By capitalizing upon this concern for bias, the researcher can enhance the credibility of the study.

Although I may have had a professional relationship with the study participants, a particular effort was made to eliminate concerns regarding any perceived authority. Interviews were conducted outside of the regular working day and at a non-school location. This distance from the employer/employee relationship proved to be more comforting to all of those involved and decreased the probability of biased responses. The organizational chart for the school district clearly separates individuals who serve in the director capacity from those in the school system who have influence over staff evaluations and personnel decisions. The job requirements of the Director of Student Services includes duties as they pertain to staff support rather than any roles that might have been construed as having evaluative authority which further mitigated opportunities for conflict (see Appendix 4).

Confidentiality. Confidentiality was of utmost importance in this research study. The IRB approval process was used to dissuade concerns regarding informed consent and confidentiality. A detailed listing and explanation of risk and benefits was provided to the Superintendent of Schools as well as employees of the school system. Procedures for ensuring confidentiality of responses were outlined and a signed consent agreement was incorporated. Selected participants were reminded that they could revoke consent or refuse to answer a specific question at any time. Fictitious names were used throughout the process. Identifying information was not shared with building or district level administrators. References to specific individuals were general in nature to protect subjects from identification. A case study data file was used to store all relevant information. This information was password protected. Tangible data were stored in a data notebook off school property and was only accessible by me and dissertation committee. All data, interview recordings, and summaries were kept at my primary residence rather than on

school property. All data was de-identified at the end of the project in accordance with IRB guidelines.

Data collection. Data was collected through a survey, interviews, and document review. This triangulation of data increased the validity of the study, provided a deeper view of the district's effort, and created a broader panorama of the dynamics at play. Specific data collected examined teacher perceptions, change dynamics, and historical processes as they related to change within the district.

Survey. In order to glean the general perspectives of educators within the system, an appropriate pre-existing survey was sought but not found. In light of this absence, I developed an exploratory survey designed to elicit general educator perspectives on continuous improvement activities within the district (see Appendix 5). The survey instrument was created utilizing Likert-scale, ranking, and open response items. The item pool was reviewed by committee members, the Institutional Review Board and individuals associated with a local research agency. The survey was designed in a manner that collected basic demographic information such as the educational level of the respondent, position, social history within the county and degree of involvement within a variety of continuous improvement activities. The survey then asked the participant to rank internal factors identified within the research as those that could either enhance or hinder implementation of improvement activities (i.e., time, facilities and resources, leadership, teacher empowerment, and professional development). External factors identified within the literature as critical elements in the implementation of improvement efforts were also presented (i.e., community perceptions, political support, and social support among colleagues). In addition to the demographic, ranking and Likert-scale items, three open ended questions were added to the

survey. These questions were designed to elicit educator views on those factors that had affected improvement activities in a positive way; those factors that had affected improvement activities in a negative way and a request for any additional thoughts that the respondent might have on improvement efforts as a whole.

After final revisions, the survey was formatted for digital administration through Qualtrics Survey Management System. Particular attention was given to assign unique identifiers to each survey invitation as this would allow me to identify a representative interview pool. The program assigned a numeric value to each of the Likert-scale responses (1=strongly disagree, 2=disagree, 3=agree, and 4=strongly agree). The program also calculated descriptive statistics for each of the items.

Interview protocol. For this research project, a semi-structured interview protocol and a digital recorder were utilized rather than a process where the researcher relies on a rigid list of interview questions, pencil, and paper. As offered by Glesne (2011), this allowed me to be much more “present” in interactions with the participant. This format also allowed opportunities for me to probe deeper in order to capture more of the perceptions of the individual. The wealth of information captured by simply letting the tape recorder do the work was well worth the time spent transcribing.

Each participant was provided with an informed consent (see Appendix 6) prior to the interview. Meeting times and location varied according to the convenience and comfort levels of the interviewee. Open-ended interview questions were utilized in an attempt to solicit active involvement on behalf of the participant while respecting the natural relationship between the participant and myself. The interview protocol was simply used as a guide when needed to refocus the conversation on the study at hand.

Participant selection. The first critical task of any research project is to identify participants for the project. Because of the limited staff size of the district involved, all staff members who worked in the district for at least five years received an online survey that was completed confidentially. This survey provided a general overview of the experiences of teachers within the system. Stratified purposeful sampling was then used to select interview candidates in order to allow me to select candidates based upon certain criteria. According to Sandelowski (2000), this technique allows the researcher to ensure that “varying cases based upon predetermined variables are included” (p. 250). In this case, participants were selected to reflect survey completion demographics of location and their role within the district. This methodology of selection allowed me to reduce personal bias while providing a variety of perspectives from across the district. I distributed the electronic survey to 173 educators employed by Alleghany County Schools. These educators included teachers, support staff, teacher assistants, and administrators at both the school and district level. Surveys included unique identifiers that allowed me to select potential interviewees.

One hundred and fourteen (114) individuals submitted the survey across a two-week period. This response rate of 65.8% was determined to be sufficient to glean perspectives from a wide variety of educators within the system. I screened completed surveys to ensure that only individuals who had been employed in the district for at least five years were included in the pool of potential interviewees. I then culled respondents who indicated that they had not been involved in any of the improvement efforts. The resulting pool was then sorted by place of employment (Three Forks High School, Peach Bottom School, Crab Orchard School, Vox School, and the district office). Purposeful sampling was utilized to ensure that the pool of potential interview candidates were not only representative of the

respondent pool and school system as a whole, but also allowed the opportunity to glean perspectives of respondents who presented unique views on items of interest.

Respondents to the survey were proportionately represented across the four schools and district office. This proportionality was mirrored in the selection of the interview candidates. Gender representation within survey respondents showed that 17.27% of respondents were male and 82.73% were female. The interview pool of eleven staff members echoes this gender distribution with 18% of the candidates being male and 82% of the candidates being female. Table 5 and Table 6 provide a view of the positional and age demographics of both the respondent pool and the interviewee pool.

Table 5. Demographics of Participants: Positions

Position	Survey		Interview Candidates	
	<u>Respondents</u>	<u>Percentage</u>	<u>Candidates</u>	<u>Percentage</u>
	(n=109)		(n=11)	
Teacher	53	48.6%	5	45.5%
Support Staff	30	27.5%	3	27.3%
Teacher Assistants	14	12.8%	2	9.1%
Administrators	12	11.0%	2	18.1%

Table 6. Demographics of Participants: Age

Age	Survey		Interview Candidates	
	<u>Respondents</u>	<u>Percentage</u>	<u>Candidates</u>	<u>Percentage</u>
	(n=110)		(n=11)	
20-29	11	10%	1	9.1%
30-39	22	20%	2	18.1%
40-49	44	40%	5	45.5%
50-59	30	27%	3	27.3%
60 or older	3	2.73%	0	0%

This process of interviewee selection allowed me to probe deeper in order to provide a more detailed representation of the results from the survey and glean perceptions from a variety of viewpoints.

Data analysis. Once the surveys and interviews were conducted and transcribed, the need for follow up interviews was assessed. Using Atlas ti software, I analyzed survey responses and transcripts using open coding techniques. Once saturation of codes was evident, I then used the constant comparison method, which is accepted in the development of grounded theory to record and classify the qualitative phenomena. I looked for similarities and differences among the data sets in order to identify preliminary categories (Schram, 2006). As predominant themes emerged, specific phenomena were examined across categories in order to discover additional relationships. As the data collection and analysis process continued, new information was continuously compared with existing data so that new relationships could be discovered (Goetz & LeCompte, 1981). The transcriptions and recordings were reviewed multiple times to ensure validity of the transcription as well as to mine for any missed themes. The transcripts and data summaries were then shared with

committee members for checking in order to enhance the validity of the data by ensuring that I had not changed data in any way through the process of collection and analysis.

The data collection process also required me to gather documents that included pre-existing survey results, school board minutes, news releases, and other relevant documents for review. Each of the data components were analyzed using the same constant comparison methodology. I looked for specific interactions between systemic elements and the consequences of each. Interactions were then mapped. By using the methods described in Glesne (2006) to progressively sort and define data, and then organize the data into clumps or themes (i.e., culture, management, collaboration and impact), an organizational framework began to emerge (p. 152). The coding process and comparison of data results allowed me to develop a more comprehensive dialogue of educator perspectives within the district rather than making sweeping generalizations about the process.

Limitations. This case study completed an in-depth exploration of educator perspectives of change through the rural lens. This study was limited in terms of demographics, definition, and scope as well as participant selection.

Although rural communities make up an overwhelming majority of America's landscape, rural perspectives on educational reform are somewhat limited. This particular case study was set in a rural, geographically isolated, high-poverty school district located in the western mountains of North Carolina. These demographics limit the applicability of the study to more urban districts or those that may be classified as rural but do not share the geographic, cultural, or socioeconomic characteristics.

The school system identified in this case study is defined as being successful. The definition of success outlined in the body of the study is determined by measures specific to

North Carolina academic performance indicators. These delineators pose a second limitation for comparison within the study. Districts in other states will have differing assessments and performance benchmarks. Several of these are unique to Alleghany County Schools, but many are not. These limits will be further diminished if comparing school districts in states where the Common Core has been adopted.

The actual population introduced limits this study. Alleghany County is a very small county with approximately 11,000 year round residents and an average of 1,500 students enrolled in three elementary PK-8 schools and one high school. Although this demographic makeup may be somewhat limited in scope, it is nonetheless shared with other districts that may benefit.

Participant selection was limited in this case study to those teachers who had been employed in the school district for at least five years. Within those meeting these criteria, eleven were selected for in depth interviews. This limited sample size was, however, sufficient to glean the varying perspectives of teachers involved in the continuous improvement efforts of the school system involved.

In spite of the limitations, the significance of this case study and its contribution to similar districts fills a distinct gap in existing literature. Because rural areas like Appalachia are seldom included in educational research, the voices of educators who serve over 30% of the students within the United States remain unheard. Because the processes of continually improving education are increasingly complex, especially within those districts marked by poverty and perceptions of resistance, it is even more critical that these perspectives be captured. Lessons learned from these perspectives can be a valuable asset to educational leaders who are determined to ensure continuous improvement within their similar districts.

Overview and Appropriateness of the Methodology

This research project required an in-depth examination of a specific example of educational improvement efforts in a rural district. These characteristics and the specific research questions outlined required a case study approach for examination. Marshall (2006) matches the research questions to the purpose of the study by describing projects as exploratory, explanatory, descriptive, or emancipatory. Marshall could best describe the case study presented as exploratory in that it gives a view into what was happening within the district, looks for salient themes and patterns of meaning for the participants, and concludes by an examination of how these patterns are linked together. Marshall (2006) takes this description further by designing a “conceptual funnel” portraying research that examines a specific phenomenon that is funneled down to the individuals who are committed (willingly or not) to educational improvement, so that their experiences may be gleaned. In this case study, these experiences and perceptions were funneled through the multiple methods of data collection that were used (surveys, interviews and document review). The data were then analyzed in an ongoing manner that provided a comprehensive view of the patterns and dynamics at work within the system.

Chapter Four: Results

The purpose of this research study is to explore and describe how educators (teachers, assistants, support personnel and administrators) experience continuous systemic improvement efforts as implemented within their district. The following research questions were used to guide this exploration of educator perspectives of continuous improvement within a rural Appalachian setting:

1. What are the educators' views about the continuous systemic improvement efforts implemented by the school district?
2. What do the educators involved perceive as the external and internal factors influencing the improvement efforts of the school district?
3. In what ways does collaboration and relationships with colleagues affect improvement efforts? (Davis, 2009)
4. How do community and cultural factors affect participants in the improvement process?
5. How do educators see their role concerning the continuous improvement efforts within the system?

In order to glean a full perspective of district-wide continuous improvement efforts, I utilized an online survey, individual interviews and existing document reviews.

This chapter begins with an introduction of participants involved in the research project and is followed with a presentation of the results of the survey, interviews and existing documents. Patterns and themes will then be presented within the framework of the

research questions provided. A summary of survey results can be found in Appendix 6 of this document.

Participants

Surveys were administered to 173 educators within Alleghany County schools. Educators were identified using the employee email database to ensure that no possible candidate was inadvertently excluded. Demographic data of the 114 individual respondents was used to construct a representative sample of eleven potential interview candidates. A demographic outline of the sample is presented on pages 83-84 of Chapter Three. Each of the eleven candidates who were invited to participate willingly agreed and provided valuable insight into district improvement activities.

Specific interview candidates included three individuals from Three Forks High School, two individuals from Peach Bottom School, two individuals from Crab Orchard School, three individuals from Vox School and one district representative. Each participant has worked within Alleghany County Schools for a minimum of five years and has been directly involved in at least one continuous improvement activity. The resulting sample resembles the enrollment patterns consistent throughout the district.

Thomas is a male teacher in his thirties who is in the process of obtaining a master's degree. He grew up in the western region of North Carolina and now lives in an adjacent county that is considered part of the Southern Appalachian Mountain region as well. Thomas has been engaged in professional learning communities and STEM initiatives within the county. Alleghany County is the only school district in which he has worked.

Rose is a female classroom teacher in her early fifties. She has completed a master's degree and is designated as a National Board Certified Teacher. She grew up in Alleghany

County and raised two children who graduated from the public school system in which she works. Rose has been engaged in professional learning communities and STEM initiatives throughout the county. In 2011, she approached district leadership about a specific STEM project that she wished to complete within her classroom and has implemented the project as it was designed. She has not worked in any other school districts.

Hattie is a fifty-year-old female who is employed within the same school as Rose and Thomas as support personnel. She has completed one master's degree and is pursuing a second. She grew up in the county and raised a family within its borders. Hattie has participated in reading and dropout prevention activities as well as professional learning communities. She has not worked in any other school district, but has worked in another organization within the county.

Erika is a female teacher assistant who is in her early twenties. She has completed a bachelor's degree and moved to the county while in high school. She graduated from the district high school, attended college and returned to the county to begin her own family. Erika has been involved in technology improvement activities and dropout prevention.

Valerie is a female employed as support personnel and is in her mid-forties. She has completed a master's degree and has earned recognition as a National Board Certified Teacher. She grew up in the area and returned to the county to raise her family and pursue her career in the educational system. Valerie has been involved in Reading and STEM activities as well as professional learning communities.

Conchita is a female classroom teacher in the same school as Erika and Valerie. She is in her mid-thirties and moved to the area ten years ago. Conchita began work in the system as a teacher assistant, earned her bachelor's degree in education while working full

time. She has been engaged in reading and STEM activities as well as professional learning communities. Conchita has lived and worked in the private sector in larger, more metropolitan areas but Alleghany County is the only school system in which she has worked.

Angela and Kate work in the same school. Angela is a female classroom teacher who is in her thirties. She has completed a master's degree. She grew up in the county, but moved to an adjacent county when she married. She chose to return to Alleghany County as her place of employment because of the reputation of the district. She has been engaged in reading activities, the model classroom initiative, and professional learning communities. Kate is a female support staff member who is in her mid-forties. She has completed a master's degree and has been involved in reading activities and professional learning communities. She grew up in the county and raised two children who graduated from the district high school. She has not worked in any other school districts.

Grace is a school administrator who is in her early fifties. She has completed a master's degree and earned recognition as a National Board Certified Teacher. She grew up in an adjacent county and moved to the district because of the reputation of the district. Grace has been actively involved in the reading, STEM, and LASER activities as well as professional learning communities. Her work history includes other rural school districts as well as a large, urban district.

Sally is a classroom teacher in her mid-forties. She has completed a master's degree and has earned recognition as a National Board Certified Teacher. She grew up in the county and returned to raise her own family. Sally has been engaged in reading improvement activities and professional learning communities. She worked for a short time in another rural school system in the state.

Herbert is a male administrator at the district level. He is in his mid-forties, grew up in the county and is now raising his family in the district. He has completed a master's degree and has pursued additional education. He has participated in STEM and dropout prevention activities, the LASER Institute and professional learning communities. Alleghany County Schools is the only system in which he has worked.

A summary of interviewee demographics is provided in Table 6.

Table 7. Interviewee Demographics

Interviewee	School	Role	Characteristics
Thomas	Three Forks High School	Teacher	<ul style="list-style-type: none"> Grew up in western NC, but is not native to county; lives in adjoining county Only worked in Alleghany County Schools
Rose	Three Forks High School	Teacher	<ul style="list-style-type: none"> Is in his mid-thirties Grew up in Alleghany County; returned after college Has only worked in Alleghany County Schools
Hattie	Three Forks High School	Support Personnel	<ul style="list-style-type: none"> Is in her early fifties Grew up in Alleghany County; moved away and has returned Has only worked in Alleghany County Schools, but has worked in non-educational institutions
Erika	Vox Elementary	Teacher Assistant	<ul style="list-style-type: none"> Is in her early fifties Grew up in urban area; moved to county in high school; returned after college Has only worked in Alleghany County Schools
Valerie	Vox Elementary	Support Personnel	<ul style="list-style-type: none"> Is in her early twenties Grew up in county; returned after college; lives in county Has only worked in Alleghany County Schools Is in her mid-forties
Conchita	Vox Elementary	Teacher	<ul style="list-style-type: none"> Grew up in another country, lived in urban areas, moved to Alleghany County Has only worked in Alleghany County Schools Is in her mid-thirties

Interviewee	School	Role	Characteristics
Angela	Peach Bottom Elementary	Teacher	<ul style="list-style-type: none"> • Grew up in county; returned to area after college, lives in adjoining county • Has only worked in Alleghany County Schools • Is in her thirties
Kate	Peach Bottom Elementary	Support Personnel	<ul style="list-style-type: none"> • Grew up in county; returned after college; lives in county • Has only worked in Alleghany County Schools • Is in her mid-forties
Grace	Crab Orchard Elementary	Administrator	<ul style="list-style-type: none"> • Grew up in adjoining county; lived in urban areas; lives in adjacent county • Has worked in urban and rural school systems • Is in her early fifties
Sally	Crab Orchard Elementary	Teacher	<ul style="list-style-type: none"> • Grew up in county; worked in another rural district; returned to live in county • Has worked in another rural district • Is in her mid-forties
Herbert	District Office	Administrator	<ul style="list-style-type: none"> • Grew up in county; returned after college; lives in county • Has only worked in Alleghany County Schools • Is in his mid-forties

Findings

I utilized grounded theory to organize and understand the perspectives of educators as gleaned from in-depth interviews along with the open responses to survey items and document reviews. The survey elicited responses from a variety of questions that were designed to glean teacher perspectives regarding improvement activities within the district. I was fortunate to have access to the results of three pre-existing surveys completed within the county. These surveys consisted of a school climate survey conducted in 2007 by Horatio Sanchez designed to assess school climate, the Breaking Ranks NASSP Survey which was administered to all staff within the county and the Alleghany County Community Input Study

conducted by the High County Council of Governments for the purpose of formulating an economic development plan. This particular study consisted of a community-wide survey, focus group and student survey. The results of all three surveys were used to triangulate data within this report of findings in order to add validity to the results and provide insight into probes for the interview process. (See Appendix 8). After the interviews were complete, each transcript was read and re-read on multiple occasions so that I could utilize open and selective coding as a means to identify salient themes throughout the interviews. I read through each of the transcripts and utilized Atlas technology to identify significant words, phrases and passages within each document. Before beginning the initial coding exercise, it was important for me to confirm a consistent description of the community, the school system and the changes experienced. I also paid particular attention to saturation of concepts within the interviews and identification of those themes presented across multiple interviews rather than just strongly within one or two.

Once I had identified a saturation of prevailing themes within the interviews, a second coding exercise using constant comparative analysis was used to combine codes into code families and explore any possible relationships. An additional reading allowed me to group data into prevailing themes based upon the strength and saliency of their representation within the data sources. I then examined existing data sources such as previous surveys and consultation reports from the Sanchez project to see if those same themes were present in other documents. This allowed me to triangulate the data and ensure the validity of the responses. In the initial coding exercise, 18 separate codes emerged from the data and are included in Appendix 9 of this document.

The second coding exercise allowed me to examine the data for consistency with the framework of the Concerns Based Adoption Model and finally to merge the categories into four themes while at the same time identifying unique observations worthy of further study. This framework is demonstrated in Figure 2.

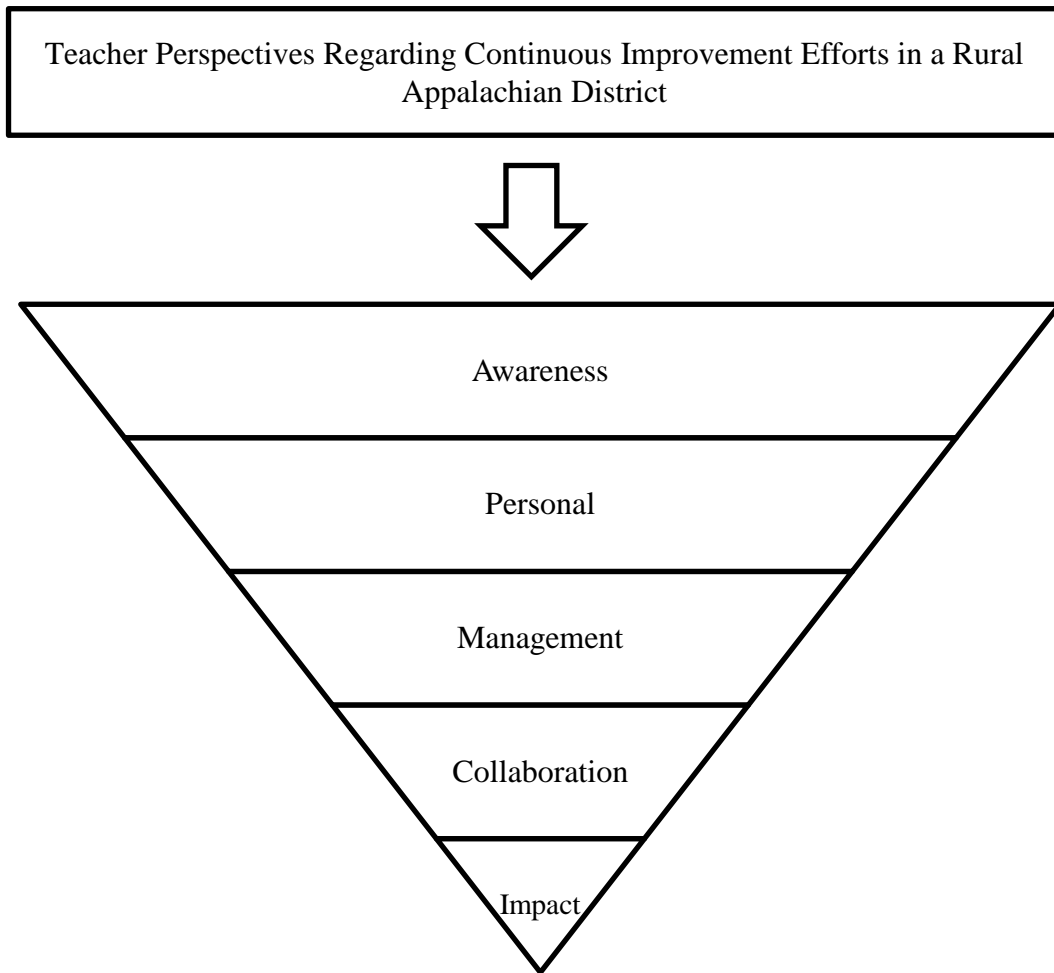


Figure 2. Conceptual Framework of Concerns Based Adoption Model

The four themes that prevailed after thorough examination were built on the categories existing within the data and are represented in Figure 3.

Culture	Collaboration	Impact	Management
<ul style="list-style-type: none"> •Cultural advantages •Cultural disadvantages •Cultural differences •Description of community •Description of school system •External factors •Unwritten rules •Politics •Community influences •Cultural influences •Size •Self-sufficiency •Institutional memory 	<ul style="list-style-type: none"> •Collaboration with colleagues •PLC's •Internal factors •Relationships •Unwritten rules •Naturally occurring interactions 	<ul style="list-style-type: none"> •Impact •Instruction •External influences •Internal influences 	<ul style="list-style-type: none"> •Internal influences (time, resources, etc.) •Educator role •Self-sufficiency

Figure 3. Themes and corresponding codes

Each of the themes were examined within the context of the rural school system and community that provided the setting for this study as well as within the context of the changes that were experienced. Survey responses allowed me to glean views of the system, community and changes encountered while interview questions allowed for a deeper exploration of the personal experiences of individuals involved. It is through careful examination of each of these themes that the research questions presented in this study will be scrutinized.

Description of the school system. Each of the interviewees invariably described the school system as a great place to work and felt fortunate to work in the system. Herbert, Sally, Erika and Valerie described a fondness for teaching in the system where they grew up and attended school themselves. This commitment to the system is further exemplified in the release of the 2012-2013 North Carolina Department of Public Instruction's Annual Report

on Reasons Teachers Leave the Profession, which shows that Alleghany County has one of the five lowest turnover rates in the state (NCDPI, 2013). The following table shows that these low turnover rates have held constant over time and the stability of the workforce is consistent.

Table 8. Alleghany County Teacher Turnover Rates by Year

School Year	Alleghany County	State Average
2012-2013	8.40%	14.33%
2011-2012	11.81%	12.13%
2010-2011	6.06%	11.17%
2009-2010	8.57%	11.10%
2008-2009	12.12%	12.72%

Kate and Rose described working in a caring system that puts students first and wanted them to succeed rather than, as Herbert described, “just blessing their hearts.” The system is described as one where teachers can trust each other and the administrative staff. Herbert, Grace and Valerie each described the system as one where administration valued the opinions of staff members and even the central office staff was visible and known by students and families. Herbert states that:

I definitely feel that I can. . . that I can share my thoughts. . . but that whether they would be agreed with or disagreed with. . . even if they thought that it was. . . if I was entirely off base, I trust our leaders . . . that I could talk to them about anything.

This perception is supported in the Breaking Ranks Survey where 74.9% of staff either agree or strongly agree that staff members are regularly asked to give input regarding school programs and practices. Sixty percent of staff surveyed either agree or strongly agree that they feel their opinions are valued. Several of the interviewees described the system as being a close-knit family that looked out for one another, however; Thomas expanded upon this by

stating that while this was true for Alleghany County, this was not necessarily always a good thing in that while there were positives to being in a close-knit family, there were also “underbelly issues” and conflict that exist in every family. He describes these relationships as follows:

I'd say if I had a big criticism of the school system I would say that it doesn't run like a business, it runs like a family. And a family sounds great, and [is] in theory, but in a family you're tied together. You're forged together by blood and the bonds are so unbreakable. And there's always going to be fighting and friction or whatever . . . but if you ran it like a business where the best person got the job, if it was a meritocracy, I feel like our schools would be completely different than what they are now.

Grace and Sally take a more positive view of the family climate within the district by claiming that it is this very atmosphere that makes collaboration easier and change more personal. In reflecting on the differences in perspectives it should be considered that Grace and Sally both originate from Alleghany County or an adjoining mountain county, while Thomas is native to a more urban district. The conflict between preserving the family nature of the rural Appalachian culture and fostering a more urban-like business atmosphere is repeated as other interviewees recount experiences of those considered to be “outsiders” trying to fit into the existing culture.

Sanchez (2007) captured many of these same sentiments in his study, which provided in-depth analysis of data obtained from a week-long research project in each of the four schools that make up the district. The accompanying surveys and focus groups provided adequate data related not only to the climate of the schools, but also their acceptance of change and improvement activities. Results of the project corroborate the aforementioned

perspectives in that it reports the greatest strength for each of the four schools lies in the relationships between the staff members and the students as well as the relationships between the school and the community.

The Sanchez (2007) study identifies feelings of complacency among staff in terms of identifying the need for change. This aspect is also presented in comments to the 2013 High Country Council of Government's Survey (HCCOG) where respondents were asked to consider the single greatest weakness that could negatively impact growth and prosperity. The Sanchez report proposed that high academic performance diminished the sense of urgency associated with a need for change which is echoed by community members in the HCCOG report showing that tradition, resistance to change and preference for the status quo are prominently listed as threats that negatively impact growth and prosperity within the county. Grace describes the complacency that was found in the Sanchez study by reiterating that people are reluctant to change which is encompassed in the prevailing attitude that Sally describes as "If it ain't broke, don't fix it." Sally goes on to describe that it is difficult to persuade someone who is having good results with students, particularly a veteran teacher, that there is any need to change. Thomas goes further to describe a disconnect between his experiences with his mentor teacher and expectations for change:

I watched him for a couple years and he's very effective at it and his classes are not boring. [In] his classes, the kids were laughing and they had a good time learning from him, but his style was completely the antithesis of what they say a master teacher would have today, but I can't think of one educator in the whole community or that I've ever met that had the reputation that he had.

Thomas announces a loyalty to a more veteran teacher while at the same time questioning the need to change when individuals are producing the very results that are sought. It is this loyalty to those who have proven themselves worthy and a desire to understand the need for change that is found throughout the interviews presented in this study, the Sanchez study (2007) and the Keefe study of 2000. Through a comparison of these studies it is evident that perceptions of resistance and loyalty to “those from around here” has changed very little over the course of thirteen years.

The Sanchez (2007) report also suggests that complacency among staff is manifest in a willingness to simply live with issues, rather than to actively work toward addressing the identified concerns. Focus group interviews showed a growing fatigue and frustration among staff leading to low staff morale. Educators also reported being irritated with having leadership implement too many new programs without adequate time allowed to identify impact. The results of the Sanchez research project shows consistency with the results of this research project in areas associated with willingness to change, management and cultural impact. Grace describes the experiences in the following:

Change is worrisome because they know this means more time, more effort and is this just going to be one more change that really doesn't last very long before we're changing again. I think the perception of change with teachers is "Oh, here we go, it's one more thing" because a lot of times we're doing the same initiatives just with a different name. And I think. . . I think teachers get tired of that. They spend so much time on change that they don't feel like that they spend enough time with students doing the real actual teaching.

Thomas, Sally, and Herbert concur with this need to spend time actually teaching students. Both state that they need time to perfect a particular strategy before changing to do something else. This presents a perception of conflict between the need to continually improve and the established purpose of teaching students.

Description of the community. In their interviews, Thomas and Grace both described the isolation of the county, with Thomas stating:

We're on this island – we might as well be in the middle of the ocean because we're up on this mountain and people don't want to come up the mountain unless they're vacationing or unless they have business up on the mountain. And so it's not like there are a ton of different things that people can come up here to do.

This sense of isolation is prevalent in the HCCOG report as community members report this same isolation as being one of the greatest weaknesses of the county.

Each of the interviewees described the poverty within the county. Angela states specifically: “We do have a lot of high poverty and we have a lot of people doing without, but even though I'm not doing without, I know people who are.” Rose, Herbert and Grace describe the lack of industry and higher wage jobs. Each of the respondents recognize a distinct gap between “the haves and the have-nots” that is prevalent even within the staff of the school system. Grace describes these differences as:

I think it [the county] has a diverse population socioeconomically. There's not a lot of diversity other than we do have Hispanics. We don't have a lot of ethnicity. . . ethnic diversity. I think we have big differences between the haves and the have-nots. I think we have a population that has grown up here and we have people who have

done well, that are professionals that are good financially and then we have some very, very poor people here.

While everyone describes people in the community as friendly, Grace describes the difficulties that individuals have fitting in when they move to the area especially by affluent individuals:

Unless you grew up in a rural place . . . it's hard to fit in. Because people have known each other forever. They've lived here all their lives. You are different. You are different not only financially but your social expectations are different.

This conflict repeats itself as Grace goes on to describe how people move to the mountains and then want to change the culture to reflect their more urban experiences. This conflict between those “from here” and those who are not is perceived as an inability of “newcomers” to deal with the issues associated with being rural.

Results were mixed (48% = good or very good; 51% = fair or poor) when respondents to the High Country Council of Government's survey were asked how well the community welcomes newcomers and new ideas. This concept is reiterated by each of the other interviewees with particular emphasis placed on this reluctance of the community to accept outsiders being influenced by the origins of those moving in. Conchita described her efforts to clarify that she was from South America rather than Mexico as this was more acceptable by the population. Others describe a reluctance to accept individuals from across the state line in Virginia or those from Florida. Individuals from larger cities are treated with skepticism as well.

Each of the interviewees describes the slow pace of the community and the close-knit relationships that exist. While drawbacks like gossip and judgmental attitudes were described, the interviewees were overwhelmingly positive about the benefits of a community where everyone knows everyone else. They describe knowing that their neighbor will be supportive and available should they find themselves in need. They each describe pride in knowing the members of the community and value the “word of mouth” communication that exists. Sally describes the community strengths by stating: “We just take care of our own . . . and that’s just the way it is.” She elaborates by describing how churches in the area ensure that every child is taken care of at Christmas and how the community makes sure that each child has a new pair of shoes in the fall and in the spring, as well as a warm coat for the winter. This same sentiment is reiterated by Grace.

Highlights of the Breaking Ranks NASSP survey include an indication that there are close relationships between schools, parents and the community at large. The survey, which was administered to staff, parents and students through a confidential on-line format, again supports many of the salient themes within this current research project. Over 65% ($n=1130$) of all respondents either agree or strongly agree that the school district partners with individual businesses, organizations, colleges, etc. in order to improve student learning. Seventy-five percent of the 33 community leaders surveyed through the HCCOG project rated the capacity of the public schools as either good or very good to help improve the education/skill level for a new or existing workforce. Of the 1,130 individuals represented in the same survey, 76.3% agree or strongly agree that parents, students, and staff work together to make the school a better place for students. Grace is of the same mind in stating:

I think we're more connected to our schools and through our community. . . . I do think we put a higher regard to education than other places in the state. I think we still have high expectations for our kids and their learning, even though we have people in poverty who don't maybe understand that. . . they still know that education is pretty much important.

Within the youth focus group for this same study, which consisted of students enrolled at Alleghany High School, over 40% stated that they would move back to the community after college if a job were available. The results of the anonymous survey administered to the same demographic supports the concept of “brain drain” found in rural literature and is evident throughout the following results:

- 80% of responding students plan to go to college and move away.
- 73% are not interested in returning to Alleghany County after they finish high school or college.
- Only 38% of responding students plan to move away for a job and return some day.

The final evaluation report of the High Country Council of Government Report supported the prevailing themes of the other data sources. The report identified strengths within the county as strong relationships within the community, teamwork, natural beauty and farmland. Weaknesses were identified and consisted of a lack of vision, complacency, close-mindedness and apathy along with infrastructure and isolation.

Changes experienced. This research project was conducted to explore the perceptions of educators who had experienced district-wide continuous improvement efforts that centered on STEM education, reading, technology, professional learning communities and dropout prevention activities. While implementation of each of the designated activities

have been seen generally as effective, it is noteworthy that there were perspectives expressed showing that several of the initiatives needed improvement, particularly those related to professional learning communities. These perspectives are presented in Table 8.

Table 9. Perspective on Implementation of Improvement Activities

Initiative	Effective	Needs Improvement	Ineffective	I was not engaged in this effort.
Reading	53.61%	15.46%	1.03%	29.90%
STEM	34.07%	16.48%	1.10%	48.35%
Model Classrooms	29.35%	15.22%	-	55.43%
Dropout Prevention	19.10%	13.48%	1.12%	66.29%
LASER Institute	11.90%	7.14%	-	80.95%
Professional Learning Communities	45.45%	36.36%	2.02%	16.16%
Instructional Technology Master's Program	19.32%	3.41%	1.14%	76.14%
Other	9.38%	6.25%	-	84.38%

Through survey responses and dialogue within the interviews themselves, educators described an atmosphere that also included state-mandated technology changes like Powerschool, Common Core, Read to Achieve, and project-based learning. They also described frustration with changes presented only a few months prior by the North Carolina General Assembly. These changes included: merit pay, loss of tenure and installation of performance-based contracts available to only 25% of the teaching staff within a school district, elimination of pay for advanced degrees and school vouchers. When asked about these perceptions of education, Sally's response was quite simple: "Right now, we're looking really bad just being in the state of North Carolina." Later she reiterated:

We're out there trying new things all the time and that's great about Alleghany.

Alleghany tries to treat our teachers professionally and like our state . . . I don't feel very appreciated right now but I do feel appreciated by our local administration and our school board and stuff.

Surprisingly, educators presented strong viewpoints on changes to the school calendar to include intercessions and attempts to move toward a middle school model, both of which occurred five to eight years prior and were defeated. Kate reflected: "I know when we were talking about the middle school thing that that was a big to do thing with you know . . . the outside schools - Glade and Piney." Sally's perspective as a teacher in one of the outlying schools is encompassed in the following:

This community has had to fight for years to keep this small school open and they're always afraid that somebody is going to come in and try to take this school away. So this community is very observant, very in tune with what is going on in the county. [They are] wanting to be informed. Anything that would be a change that could possibly hurt this school, they will not get any support from them and they will fight it tooth and nail and to the death.

Internal factors related to improvement activities. Respondents to the survey administered as part of this study were asked to rank order internal factors in regards to their impact upon improvement activities within the district. Factors included time requirements, facilities and resources, leadership and administrative support, teacher empowerment and professional development. Respondents were also given the opportunity to provide any factors not listed. Survey responses show that time requirements were seen as the most important factor related to school improvement across the majority of demographic

subgroups (gender, age, degree, position, and origination to county). Leadership and teacher empowerment were also seen as important in two specific subgroups. Leadership was more important to those who chose to work in the county based upon the reputation of the county while teacher empowerment was more important to those in the 60+ age group.

In rank ordering of external factors related to continuous improvement (community, political, and social), social factors were seen as the most important across the majority of the same demographic subgroups. Political factors were ranked more important by respondents in their twenties and among school administrators, those coming to work in the county because of its reputation and those who have completed bachelor's degrees. One could surmise that this would be in response to the current political climate in North Carolina, which has been marked by lack of teacher raises, elimination of teacher tenure and lack of support for advanced degrees. Community was ranked higher by those in their fifties and sixties and non-degreed employees.

Questions regarding each individual factor were presented only to those respondents who ranked those factors as one of their three highest areas of importance. The results of those survey items follow.

Time. A total of 57 respondents indicated that time was one of their three highest ranked factors associated with continuous improvement. In items related to time requirements, 54.39% of respondents felt that the activities took too much time but 64.92% of those same respondents did not believe that they were a waste of time. Grace describes the conflict in this manner:

I think there has been a lot of emphasis on the improvement activities but I think they're needed. I think maybe they just came too many at once. And I think its. . . we

weren't able to absorb it and implement a few at a time. . . to do those very well, before we went on to something else.

Of these respondents, 57.89% did, however, express concern about conflict between the improvement activities and their job responsibilities. A majority (54.38%) also expressed concern about having enough time to manage all of the improvement activities. Time was also identified as a prevailing theme in both the survey administered as part of the Breaking Ranks Survey and the Horatio Sanchez survey.

Facilities and resources. A majority of respondents (65.52%, $n=29$) either disagreed or strongly disagreed with the statement that district improvement activities had been a waste of money while 93.1% either agreed or strongly agreed that the district had made adequate resources available for implementing improvement efforts. 48.27% agreed that those resources devoted to improvement activities could have been better distributed. 57.14% of the respondents believed that they had enough resources to implement district improvement efforts.

Leadership. The Leadership series of questions was answered by a total 40 respondents. Of those respondents, 82.5% felt that administrators acknowledged and celebrated the achievements and accomplishments of others in efforts to ensure student success. Eighty percent believed that administrators encouraged innovation to improve teaching and successful learning for every student and 72.5% believed that administrators listened to their concerns. Over 70% (70.73%) of respondents either disagreed or strongly disagreed with the statement that they believed their district put too much emphasis on improvement activities and 80% either agreed or strongly agreed that the ideas and views offered by others to resolve problems and improve learning are supported.

Teacher empowerment. Thirty-four individuals responded to the Teacher Empowerment series of survey items. Results were somewhat mixed in response to the item that stated that the individual felt pressured to participate in district improvement efforts (52.94% either disagreed or strongly disagreed; 44.12% either agreed or strongly agreed). A majority (64.7%) did not believe that their professional autonomy was restricted by district improvement efforts and 73.26% believed that improvement efforts were consistent with their view of what their role as an educator should be. Of the respondents, 67.65% either agreed or strongly agreed that improvement activities made teaching more enjoyable and 88.23% stated that they contributed ideas and opinions toward improving student success. Valerie, Kate, Grace, and Angela each described open relationships with school and district administrators who listened to their viewpoints. Each interviewee described instances within their schools where even the students knew the central office leaders and felt comfortable engaging them in open dialogue about specific issues. Each expressed appreciation for opportunities to design curriculum maps, present alternative school calendars, and have input into decisions regarding the elimination of teacher tenure. The educators expressed awareness that leaders within the district had assumed responsibilities such as required reporting, scheduling and coordination of district professional developments, travel details and even last-minute cafeteria duties that could have proved overwhelming to teachers.

Professional Development. A majority of respondents (65.38%. $n=26$) to the Professional Development series of survey items believed that they have received adequate training and professional development to help implement those district improvement efforts in the areas of their engagement. Over seventy-three percent of respondents stated that they now knew of approaches to teaching that might work better than what they had previously

utilized and 65.38% stated that they had been able to advance their own education through district improvement efforts. Of the respondents, 57.69% either agreed or strongly agreed that professional development had been provided in areas that were important to the respondent. Of those same respondents, 26.93% either disagreed or strongly disagreed.

External factors related to district improvement activities. Each educator responding to the survey was also asked to rank order specific external factors as they related to district improvement activities. Factors included: community perceptions, political support and social support. Each respondent was then asked to respond to a series of questions based upon the two factors that they ranked as being most important. The findings for each series of questions follow.

Community perceptions. Forty-seven educators ranked community perceptions as one of the two highest priority items among the external factor grouping. Of those responding, 91.49% felt supported by their community in implementing improvement activities and a corresponding 91.31% believed that improvement activities were received positively by the community. An overwhelming majority of the respondents to this series (87.23%) believed that the improvement activities were well-received by parents and 91.49% believed that the improvement activities had helped the community. Results were slightly more mixed in terms of respondents' concern about conflict between the perceptions of need for improvement activities between the school and community (39.13% disagree; 58.7% either agree or strongly agree that they are concerned).

Political. Sixty-seven survey respondents ranked political factors as being one of the two highest factors related to improvement activities in the external grouping. Respondents' reactions are listed in Table 9.

Table 10. Political Support (n=67)

Question	Strongly Disagree	Disagree	Agree	Strongly Agree	Average Value
Our community leaders support our efforts to improve education	-	4	34	27	3.40
District improvement efforts are implemented in response to federal mandates	-	7	27	28	3.46
District improvement efforts are implemented in response to state mandates	-	6	25	31	3.52
District improvement efforts are implemented in response to expectations of our county commissioners	-	20	34	10	2.91
District improvement efforts are implemented in response to expectations of our school board	-	7	34	24	3.31

The reader should note that within the survey, specific change initiatives listed were only those associated with competitive grant funding pursued by the district rather than those such as Common Core, Powerschool, and others mandated by state and federal policy. The county commission serving the district does not engage in line-item approval of school budget and currently only funds the minimum required under statute. This presents a disconnect between educator perceptions of expectations from the county government as opposed to the actual expectations that are articulated through budgetary or other means.

Social. Sixty respondents ranked social support as one of the two highest factors affecting school improvement activities. A substantial majority of respondents either agreed or strongly agreed with each of the survey items which included:

- I feel supported by my family in implementing improvement activities.

(81.67%)

- I generate enthusiasm and persuade others to work together to accomplish common goals for the success of students. (81.67%)
- I feel supported by my colleagues in implementing improvement activities. (84.74%)
- I would like to help other teachers in their implementation of improvement activities (84.49%)
- My colleagues generate enthusiasm and persuade others to work together to accomplish common goals for the success of students (77.59%)

The results show that that while educators overwhelmingly report the desire to work collaboratively on educational improvement activities, they also did not believe that professional learning communities were the most effective means at accomplishing this collaboration. Throughout the course of the interviews, Sally, Grace, Thomas, and Rose all described the need to collaborate in a more authentic manner and voiced frustration that professional learning communities had evolved into “just another meeting” with an agenda set by the administration.

General questions regarding improvement activities. All survey respondents were presented with a series of six general questions designed to elicit their perceptions regarding improvement activities within the district. Of the 97 respondents who answered the questions, 85.57% either agreed or strongly agreed that improvement activities were connected to a larger goal or purpose. A total of 77.09% stated that improvement efforts made it more enjoyable to come to work and 81.25% felt that the improvement efforts had a positive impact upon their work, although 63.92% stated that they felt too many things were changing in the district. Although this was a concern for educators in the district, 57.29% did

not believe that the improvement activities were too difficult to implement. Results analysis of the Breaking Ranks survey show that 69% ($n=193$) of teachers either agree or strongly agree that the district gives them time to work together to improve student learning and 74.6% regularly participate in meaningful professional development. These data conflict with common perceptions of people in Appalachia who are resistant to change. When combined with perspectives gleaned from the interviews, it does, however, paint a picture of educators who are willing to do what is needed to improve the educational outcomes of their students. It helps to paint a picture of educators who have surpassed the elements of the Concerns Based Adoption model that are self-oriented (awareness and personal) and are progressing toward the task oriented questions of management.

Educator perspectives regarding these improvement efforts will be explored deeper in the presentation of the research questions that follow. A careful examination of each question within the framework of the prevailing themes gathered from the interviews exposes a group of educators who are intent on doing what needs to be done in order to help their students while doing so in a culturally relevant manner.

Question 1: What are the educators' views about the continuous systemic improvement efforts implemented by the school district?

Management. Management of improvement activities within the district was the most prevalent of the four themes (management, collaboration, impact and culture) that emerged in both surveys and interviews. Each of the eleven interviewees discussed the time demands needed to implement new activities and conflict with these demands upon instructional time. Interviewees consistently expressed the desire to go slowly with any

activity and perceptions of being overwhelmed with too many things changing at one time.

Conchita refers to this as she states:

Sometimes, it feels like you're doing something new. . . and then two weeks later, there you go and they tell you ok there's a new thing that we have to do. I say what do you mean? I'm still learning you know the other thing and now you're telling me that I have to learn a new thing for me sometime it's like there's a point where too much is too much. And I think that it has to be done like one thing at a time, and if it doesn't work we can say OK, you know what, this didn't work, let's take it away, let's try this new thing. Instead of doing let's try this, this, this, this, this four new things and see which one works because I think that when you do that, you might probably won't have the result that you're expecting.

Other interviewees report feeling overwhelmed and express a desire for more concentrated efforts that can be fully evaluated before starting something new. These feelings speak to the educators' desire to confirm the educational impact of endeavors prior to moving on to advanced levels of the Concerns Based Adoption Model.

Although not unanimous, several interviewees stated that they while they did not question the intent behind the improvement activities, they were growing weary of so many things changing at one time. Grace states “I think the intentions are good. And I think that’s exactly . . . what we need to be doing; we just maybe need to do them at a slower pace.” Rose shares that “I just think . . . change is too fast to really evaluate it and see if it’s really working.” Thomas provides the most comprehensive perspective on the management of change within the district by stating that:

I've seen a tendency in education to almost jump on every new wave of things that are coming. And whenever that happens there is no time to truly implement things and master them, so you are constantly chasing yourself around. But if you have time to really develop and get good at anything then that's . . . that's always going to be a good thing.

Herbert concurs with this sentiment by stating that "It feels like you never get to develop a systematic way of doing things right because you're constantly bringing in another piece that changes."

Grace and Kate both discuss their concerns about teachers who, as Grace describes, "spend so much time on change that they don't feel like they spend enough time with students doing the real actual teaching." Kate explains that:

Time taken away from the classroom to implement whatever program or whatever change it is and I think that's always been, since I've been teaching has been a concern for teachers, but then again if you're going to make improvements, you need. . .you know you do spend a lot of time outside of the classroom. And that is a complaint with the programs we're implementing this year with time to actually you know implement it within their classroom. They need the time to go back and do that.

Kate's perception is supported by responses to the open ended survey questions asking for additional insights on improvement efforts in the district. Educators responded by stating: "One day at a time. Too many new things at the same time can be overwhelming. Things are changing every day, but new things can be implemented one at a time for better results."

Grace and Hattie present a realization that the improvement activities are meant to enhance teaching, but as Hattie states, “it’s beginning to wear on teachers.” Grace states: “I think people are just tired right now and they need a break from new things.” Herbert describes these feelings by stating that “We’re almost in a constant turmoil . . . of never knowing what to expect next . . . and that it’s frustrating.” These statements reflect a personal concern associated with the management of change and is consistent with the Concerns Based Adoption Model. As these self-oriented and task oriented concerns are met, educators can then focus on impact concerns.

Impact. Interviewees were generally positive regarding the impact of the improvement activities within the district, which is consistent with survey results assessing the effectiveness of each of the activities presented. Herbert describes the system as being a beacon to other districts. Kate concurs by stating she believes that the district “has always been like a step ahead” which is further affirmed by Angela’s comment “We may not have all the bells and whistles, but we use what we’ve got wisely and we make it work.” She goes on to state that:

I think, according to the data, we’ve got a long road to go. I think that we can easily see that there’s changes that need to be made. And, I feel their (the teachers) pain as well, but in order to . . . for these students to grow; we’re going to have to step up and do what we need to be doing.

Interviewees did present a perception of willingness to change as long as the impact was apparent. Grace stated concerns that sometimes “we get caught up in doing all of the new things that we just forget that the main thing is student learning.” Sally’s statement offers further insight as she states:

I do sometimes feel like we jump on the bandwagon too quick[ly]. Everything comes down the pipeline, we're on it and some of them have been good and some of them have not been so good. That's something, I wish sometimes we just back up and say "Wait, let's see what others . . . what happens with this first before we jump in."

It is this cautiousness and desire to use energies efficiently and effectively that can be misconstrued as resistance within the Appalachian culture.

Culture. While this particular research project is examining the perspectives of teachers through the rural Appalachian culture, one cannot isolate themselves from the influences of decisions made outside of the county borders. Personal concerns regarding the lack of pay increases and the loss of teacher tenure coupled by increases in mandated testing have been particularly stressful for teachers within the district. One survey respondent aptly stated:

This is a particularly depressing time to be involved in public education; the system is seen by the general public as failing, and teachers in particular are being blamed. Politicians have tried to mandate away the trouble, taking initiative away from real instructional experts, and, unfortunately, it is also a time when the potential rewards of teaching are also at ebb.

Conchita agrees with the feelings of frustration within the district but also presents the viewpoint that while she believes that district leaders are doing the right thing and teachers want to improve, there are some people who are not ready for changes. Grace states that teachers in the district as well as members of the community are proud of their mountain heritage. She states that they like their mountain ways and are therefore, resistant to change. Both of these themes appear frequently within the comments of the HCCOG survey. One

particular response to the survey administered as part of this study describes the change initiatives as a passing fad, which Thomas also describes by saying “a lot of time new initiatives in the viewpoint of the teacher, they’re more of a nuisance because you see this trend coming this year and the next trend coming the next year.”

Erika and Rose present their perceptions of improvement within the county as having a culture of being student-focused and always concentrating on the well-being of the student. Erika states that while the improvement activities may not always be successful, that doesn’t mean that the district should stop trying. This desire to keep searching for strategies that promote student success is repeated throughout each of the interviews, indicating that educators are willing to engage in improvement activities but wish to do so in a manner that is manageable on the personal level and effective at the student level..

Question 2: What do the educators involved perceive as the major factors influencing the improvement efforts of the school district?

Management. When asked to identify the major factors that influenced the improvement efforts of the school district, survey respondents and interviewees consistently identified management of the improvement activities as being the most salient. Again, management of time, resources and personnel were the greatest presenting concerns for educators involved in the study.

Within the survey itself, respondents state that resources are provided and have been helpful, yet a discouraging factor is the amount of time needed to access general supporting materials. For example, Sally states that she sees this as being an issue of geography as well as funding.

I don't think we have as much resources and time as you know in the urban areas.

It's not as far for others to go for the trainings. You know, we have to go an hour at least everywhere for [professional development], its time and travel . . . so that's an issue. And we just don't have the quick resources to go get things that we need to help us, like "I need some of those bright colored folders to do this, to get these portfolios done, I need some of this and this and you know they're just not available here in Sparta. So, I mean you've got to go to Wal-Mart and that's forty-five minutes away.

Interviewees also state concerns with managing personnel. The elimination of staff positions was mentioned in survey responses as a contributing factor, but the management of existing personnel was more frequently noted in interview transcripts. Educators cite concerns with their colleagues getting consistent messages about what needs to be done. As Valerie states, "We're telling them one thing and then telling them another thing and they don't necessarily mesh together." This concern is echoed by Hattie who stresses that in presenting new ideas to staff, they should have the flexibility to pick and choose what works for them. Angela reiterated the need not to overwhelm teachers but to take things in small bits and pieces so that goals are more attainable for teachers.

Time was the prevailing concern among all survey respondents and interviewees. While within the Breaking Ranks survey, teachers stated that the district did give them time, it remains a concern. When asked about this discrepancy, interviewees clarified that they were given time to meet together in professional learning communities and did have early release time on Wednesdays, but this time was planned for them with a pre-existing agenda. They expressed concern that there was no specific time within the schedule to simply have

time to work either individually or within self-selected groups on the work that they felt needed to be accomplished. Sally explains:

I don't feel that we have enough time . . . planning time to implement them as well as they need to be. Like, we'll go training for something and then you come back and you don't have workdays or any, like Wednesdays or PD time, you know we go in and talk about Café and Daily Five and stuff, then you don't have time to go into your room to start setting up. I don't feel comfortable jumping up in front of a class and start teaching this and using this until I have time to sit back and get it myself.

Thomas goes on to describe the conflicts between time needed for improvement activities and requirements outside of school:

Here's the big gorilla in the room is that even if everything we learn in the PLC were good, you don't have time to implement it. I think that a lot of teachers become disheartened because they see "I've got a family . . . I've got to coach . . . I've got other responsibilities. Now I've got to do this, that and the other inside of the classroom or I'm going to get a poor evaluation.

Each of these quotes coupled with survey results show clearly that management is a valid and very real concern for educators within the school district. By acknowledging and designing a plan to address these concerns, school and district leaders can help educators transition to the impact level of concern which focuses on student outcomes.

Impact. Along with management, collaboration, and culture, impact emerges as a prominent theme within the data collected. Grace, Sally, and Rose all described the need to see the impact of the activities in which they are engaged. When asked to describe factors that would provide motivation to engage in an improvement activity, Sally stated, "Just show

me how it's going to help my kids . . . that is all you have to do." Rose repeats this sentiment in saying "If I feel it will benefit my kids . . . if it's something I can do that will make learning more enjoyable and maybe more relevant, then that's where I want to be." This desire to do what is best for their children that surfaces in each of the eleven interviews. Consistently, the interviewees assert that they are willing to do whatever is necessary in order to help their students become successful. This sentiment is echoed by the community in the Breaking Ranks survey, where 65.4% of the 1,108 respondents either agree or strongly agree with the statement, "Teachers won't let students fail. They never give up."

Collaboration. Within the survey, over 60% of the respondents state that social networks are critical to improvement activities, however, many also feel that professional learning communities are not effective. When asked to explain their perspectives on this discrepancy, interviewees clarified that collaboration was critical and as Conchita presented, "Everybody needs to be in the same boat." Angela surmises that educators do not feel like they have enough time to devote to their classrooms and they do not want to be pulled out of their classrooms just to have a meeting. Sally and Angela explain that the discrepancy may be attributable to the attitudes of the teachers involved. Angela describes this in her response:

I think you've got pockets of people who you know they're always being the leaders of the group and making that change happen, no matter what. But then you've got pockets of folks that are just ho-hum and they sit back and just do whatever.

Angela outlines the need that many staff experience for positive affirmation of their attempts at improvement. She expresses concern that teachers can "get down on themselves and what

they are doing if they aren't getting the positive pat on the back once in a while to know they're doing something right."

Culture. The culture of the district and community was consistently discussed as a factor in each of the interviews. Hattie, perhaps, summarizes this component best in saying that "part of it is probably culture and part of it is history." This sentiment is in large part due to the low turnover rate of teachers in the district that is compounded by the percentage of educators who reported on the survey that they are native or have family in the county (50.96%).

Thomas, Grace and Kate describe the influence of the history experienced by those in the district. Kate states that "a lot of teachers resist change especially the ones that have been in the system for a while. . . you are always going to have those teachers that resist change. Not all of them, but a lot of them." Thomas adds that "it's tough to break patterns that have been developed in the past because it's so close knit and you're so tied to what everybody's always done."

Each of the individual interviewees and several survey respondents cite the resistance of the community at large as a factor affecting improvement activities within the district. This resistance is also evident within the comments of those responding to the HCCOG survey question "What do you consider to be the single greatest weakness that can negatively impact growth?" Kate, Valerie and Erika all describe the resistance of the community within their interviews with Valerie describing it as:

Some people here, especially in a rural area . . . change is hard because the way we live . . . things are old fashioned - if you can describe it that way. And people are set in their ways, because that's how they were raised. That's the traditions because in

our community, we are big on traditions. And it's hard to find fault in the things that have worked for years and years.

Angela and Grace both assert that in order for change to occur, you need to have the support of the community. In order for that support to be developed, Grace emphasizes that within her community, anything that you do should be done slowly. There can be no drastic moves. If efforts are to be effectively implemented, educational leaders must allow educators the time needed to advance through the developmental stages of concern portrayed within the Concerns Based Adoption Model.

Question 3: In what ways do collaboration and relationships with colleagues affect improvement efforts?

Management. Educators interviewed throughout this research process were able to describe both positive and negative attributes of collaboration and the close relationships experienced in a rural setting. Erika described the benefit of having someone to go to when she needed to ask “What does this change mean?” She described an intrinsic value in being able to develop relationships with those who could help her figure out what a specific change meant to her in her role within the system. Erika and Valerie both concur that developing collaborative relationships within a small, rural district would be much easier to do because of the close knit atmosphere. Both educators described a process where collaborative school relationships were easier to develop because, as Valerie states: “Here, we know a lot about people's personal lives and our kids grew up together so therefore we always know a lot about what's going on.” Erika reports that collaborative relationships within a rural setting are easier because “even if you don't get along with so and so . . . you know that person.

You know their way of teaching . . . you know their style.” Valerie describes the ease with these observations:

Because people teach so closely together in a rural area . . . they are familiar with each other and truly know each other. Collaboration is so much more comfortable and easy when people know each other beyond just showing up to work and being there with a group of people and they actually have created true friendships.

In contrast, Kate, Thomas, and Hattie all describe specific ways that living and working in a small, rural setting can be disadvantageous to the development of collaborative relationships. Kate states that:

You have . . . when you become so close, you always have one or two that stir up negative. . . it doesn’t matter what you do . . .and sometimes, if they get on a bandwagon, it’s easy to suck others with them, so you know that probably doesn’t happen quite as much in a larger system because you don’t have that close relationship.

Thomas describes his concerns with “certain teachers dominating the conversation” and a perceived need to be cautious in what one says within the school setting. Specifically, he states, “I think you’ve got to know who you’re talking to. What side of the fence to stand on when you’re talking to them? Everybody’s a politician.” Grace describes the collaborative atmosphere:

I think the only thing is that it maybe is a little bit more emotional. Maybe, its more we are all tied together more tightly so it makes it more emotional and people get . . . I don’t want to say that it’s not as professional, but I think it’s viewed socially and emotionally different than it is in an urban setting.

These complexities create difficulties in the management of collaborative experiences within the school setting. Interviewees and survey respondents alike expressed concern with the management of professional learning communities (PLCs). While educators felt that social relationships and collaboration were important in any improvement activity, they did not believe that PLCs were an effective tool in providing the supports necessary for effective change. Several interviewees expressed frustration that the PLCs had transformed into another meeting with an agenda set by the administration rather than being a true opportunity for authentic collaboration.

Sally stated that while she met in their PLCs and conversation was occurring, it was not the same as “working with them [other teachers] day in and day out. She states:

I have more of a relationship . . . close relationship with our fourth grade teacher here and our second grade teacher here to just build on . . . where I build on what second grade’s done and to help prepare for the fourth grade teacher. I mean, we do our PLC’s . . . but it’s not as good as it would be if I . . . had another teacher at the same grade level.

Sally explains that PLCs can be effective if they are done appropriately and not, as Erika describes “a meeting just for the sake of meeting.” Sally describes the need for educators to go into PLCs with a positive attitude where educators are receptive to new ideas, and then they can be beneficial. Grace explains that perhaps “we don’t set up our PLCs very formally and go through the process like we should because we feel like . . . we’ve already set perimeters. We already know each other.” She goes on to state that this can be a disadvantage because “we feel comfortable talking about our kids or what we did at church yesterday or whatever rather than staying on topic.”

Angela, Valerie, and Kate believe that PLC's have been effective in allowing opportunities for colleagues to share ideas back and forth. Angela states: "I thrive on that collaboration and I feel like I need that collaboration to become a better teacher."

Impact. Educators participating in the study do believe that collaborative relationships have an impact upon the education that students receive. Grace explains: "I think that if you have that [collaboration] when they talk about it . . . it can bring about change or not bring about change. It depends on the personalities." Kate expands upon this notion by saying that "it's just natural for us to want to help each other . . . and do what's best for the kids no matter . . . what it takes to get there." Valerie concurs:

I think that [it] makes a huge impact when they [teachers] go back to the classroom and . . . when we're doing our district wide meetings and those people are trying to connect with each other and see what everybody else is doing and trying to truly meet the needs of the students.

Herbert sees the same and reiterates:

This is exactly what we need to be doing. . . this is the missing piece that we're looking for . . . sometimes you hear this in certain groups . . . a group of math teachers for example . . . finally they feel like they've figured out a way to help students learn fractions.

While educators report ways in which collaboration can enhance improvement efforts, they are also quick to describe how the culture of the county offers naturally occurring opportunities for authentic collaboration to occur.

Culture. Interviewees provided examples of the cultural nature of collaboration and relationships within the district. Each was able to describe ways in which the culture of the

district and community enhanced the development of collaborative relationships as well as ways in which the culture hindered the development of those same relationships.

Grace and Herbert refer to the close-knit nature of the community and the natural relationships that occur. Grace illustrates this point:

I think there are just so many more connections when you're in a rural district, you know people are related, people are church friends. They are civic organization friends. They are very tightly connected in every part of their life and I think that makes people more comfortable with each other . . . maybe we express ourselves in different ways. We feel maybe more open to saying what we feel to our colleagues."

Descriptions of ways in which the culture hindered the development of collaborative relationships are also prevalent in the interview transcriptions. Six of the eleven interviewees describe the reluctance of people within the schools and the community to openly accept outsiders into their established relationships. Hattie describes the experience as:

It's almost like a legacy. You know we have to stick together. No outsiders get in here. You know because they will change our community. They will change who we are. . . If your ancestors weren't from here, you haven't lived here. You'll never be native. . . I mean you'll never be accepted.

Grace expands upon the notion in saying "People move to the mountains because they love the mountains, but then when they get here, they try to change us to be like where they came from. So you have to be careful." This phenomenon is perceived by native residents as an inability to deal with the issues inherent to being rural and therefore is considered to be a cultural affront to those who treasure their Appalachian heritage.

Interviewees explain that acceptance within the community can depend upon where an individual is from or how a person behaves. Thomas states that there is a reluctance to accept people from just across the state line in Virginia. He also states that people from the north are not accepted. Erika described her difficulties in being accepted as a student coming from a larger town south of Sparta, yet because of family influences, she spoke with a northern dialect, which created reluctance on behalf of others to accept her openly. Hattie takes this view further by explaining:

If you are from here and you leave here, then don't expect there to be a welcoming party when . . . this is not the prodigal son. So you know they feel like . . . there's a feeling of betrayal. You left here. You didn't care enough to stay here and build up this community.

How one behaves is also seen as a critical element for Grace who asserts that "you can't be too citified. You have to understand the people culturally. They like being mountain people, they like their mountain ways." Research conducted by Elam (2002) asserts that this connection to place and desire to preserve a distinct heritage is a predominant reason why reform efforts in urban or suburban areas may not be particularly beneficial in a rural Appalachian culture. If educational leaders are to implement effectively a new order of educational improvement, they must understand the ways in which these outside influences affect the receptiveness of new ideas by teachers within their schools.

Question 4: How do outside influences affect participants in the improvement process?

Interviewees were able to identify several outside influences that were directly affecting participants as they engaged in the improvement process. These influences

included adoption of the Common Core, new initiatives coming out from state and federal legislators, elections, changes in tenure laws and pay scales for teachers. In light of these outside influences, interviewees were still able to focus on the influences distinct to Alleghany County. A careful analysis revealed the themes of management, collaboration, impact and culture throughout the data collected from surveys, interviews and within the document review.

Management. Interviewees expressed perceptions regarding outside influences as being related to stereotypes, geography and resources. Valerie expressed a belief that individuals “off the mountain” perceived people within the county as not being educated enough to do some things or to follow through and complete activities. She states that she does not believe that “a lot of people feel like we could pull it offThey don’t think we can manage it.”

Hattie and Angela see the predominant outside influence as being related to geography. As Hattie articulates, “I think a lot of it is geography. I really do. I mean when you have to drive an hour to get to a major city, pretty much any way off the mountain.” Angela describes the influences of being isolated and explains, “I think that it’s probably harder for this area to have the resources that other urban areas would have. You know we don’t have . . . quite the taxes coming in like even Watauga County.”

Sally relates this isolation to a lack of personnel:

You know somebody may be really good for this, and they think . . . I want to move to the mountains and teach . . . but once they get here, they’re not used to it and they don’t have a grocery store right down the road and they don’t have a movie theatre and they don’t have nice restaurants and stuff and you have to travel over an hour to

get to these things, they're not going to stay. I think that's a big hindrance. It's just the rural area, it's the resources and personnel are not available as they are in other areas.

Thomas, Hattie, and Angela describe community reactions to improvement activities as a particularly strong outside influence. Each of the three interviewees described the community response to efforts to change the school calendar. Each believed that the failed effort might have had a different outcome had it been managed more effectively. Hattie described the anger caused within the community when the school system initiated something that disrupted the established routines within the community at large.

People view the school - some people as kind of the babysitting service. And if there's any change that will disrupt what they have set up, then they get very angry. Now part of that is that we don't have the resources here to accommodate when we're not in school. We don't have the daycares . . . but you know for the general population, it was going to be a real hardship.

Thomas and Angela both presented the hypothesis that the outcome might have been different had the school system proceeded more slowly and allowed the community to embrace the idea. Thomas asserts that:

[leaders] didn't allow enough time to develop before they initiated the change. So then people felt like that change that was given to them was not something that they wanted, they condoned, that they didn't want their kids a part of. And so, they bucked it and as a result, they kind of . . . there was a big fall out from it.

Herbert summarizes this perception most astutely when he stated "If you don't [collaborate] and get the buy-in of the community beforehand, you will wish you had."

Collaboration. Collaboration with those outside of the school setting is presented as a substantial outside influence. Several interviewees reiterate that the best way to find out about something is through word of mouth. The nature of these community conversations and relationships shape the improvement activities within the schools. Angela and Hattie also revisit the school calendar debate that occurred within the district several years earlier. Angela describes the initiative as one that the community did not support. She asserted that its failure came from “small pockets of folks talking and feeding off of one another and it kept . . . escalating and escalating until it became a large problem.” Hattie concurs by maintaining that members of the community “couldn’t see past their own little community group and solidarity for the good of the whole county.” In speaking of this and other issues, Herbert ascertains that:

Folks in the community are thinking something totally different than we’re thinking and I think this school board that we’ve got now has helped us see. They’re more in tune with the community and they have a much better feel of what folks are thinking out there than what we did. And they’ve helped us do things in a . . . softer way. It’s helped us be more in tune with the community and when we do . . . not making decisions as fast or at least big decisions as fast without considering the whole community dynamic.

Culture. Again culture is the prevailing theme when assessing outside influence on continuous improvement activities. Grace explains that in an urban school, “people are changers and they change themselves . . . and they’re just used to change and . . . in a small community, you’re not as used to change.” She continues explaining that the culture in the western part of the state still has what she describes as a hangover from the struggle that the

people of Appalachia have experienced. Individuals within the community have held on to their values and beliefs that promote self-sufficiency and preservation of a distinct heritage as something to be admired. Kate describes the influence of parent expectations as being influential. She asserts that parents of Appalachia may not have as high expectations for academic progress as elsewhere. Sally, who works at the smallest school in the district, describes the fight in which the community has engaged in order to avoid consolidation.

People in the community don't like to change either. As far as the middle school, it was a territorial thing. Piney and Glade wanted to keep their teams. It all. . . .a big part of it was athletics. And then the other part of it was that was their community, that was their teachers, that was their school, their students were going to go there. The irony of it is that they don't even have enough students to have teams anymore and so they're bussed We have the consolidated team, just not the consolidated school.

Hattie also described attempts at change in the community that were not successful because of the culture of the county. She detailed the county attempts to build a dam and have a lake on top of the mountain that failed primarily because it would take a lot of farmland. She also described attempts to bring Interstate 77 through the county and the prevailing belief that a few community leaders decided to prevent the improvement in the infrastructure over breakfast at a town restaurant. Hattie expounds upon this decision by saying:

Most of them had long histories in the county. Their ancestors were leaders or were very influential or prominent in the community. And I really think that they wanted to keep this town the way it was and have the few elite that are in power and everyone else you know, just, do what they say.

Valerie takes a different view in surmising that the resistance to change is a product of fear.

Of the middle school decision, she states that:

It really goes back to we've never had a middle school. It's like their traditional way of doing things. They are afraid that it might not work, so don't they even want to stick a foot in the water to try. They are afraid of change. And they're afraid of what it would do to their families and to the community as a whole. Even though in the end, it would probably be what's best for the kids.

Question 5: How do educators see their role concerning the continuous improvement efforts within the system?

Each educator interviewed for this research project articulated clear roles and tasks that needed to be accomplished in order for continuous improvement to occur. The majority of these roles encompass the management of improvement activities within the school setting and the culture at large. These roles center on management and culture.

Interviewees state that initiators of improvement activities need to present compelling data to show that the proposed activity has been successful in a similar setting. Grace and Angela assert that educators need to be a cheerleader. They emphasize that if improvement activities are to be successful, the social- emotional needs of educators need to be met. Grace and Hattie both stress that educators need to design and organize improvement activities with special attention devoted to allowing adequate time to implement the activity. Thomas is adamant that educators need to be honest about the capabilities of students and teachers. He states that, "Educators become disgruntled when they are dissatisfied with the amount of time and efforts that they've put into things they don't feel are viable options for improvement."

When assessing the impact of culture upon roles in improvement activities, both Grace and Thomas proclaim that educators need to communicate better with the community. This assertion is supported by Herbert and Valerie who refer to a need for educators to understand the culture of the community before proposing improvements. And perhaps most critically, Grace emphasizes that, “You’ve got to learn . . . what changes are really important enough – is it really important to do it before you make the change. Is it going to make a difference?”

Chapter Five: Analysis, Conclusions and Recommendations

Purpose

This research study captures the perceptions of rural Appalachian educators and provides an analysis of how they respond to systemic improvement efforts. Specifically, this case study examines the experiences of educators within Alleghany County Schools, North Carolina, who are striving to meet the educational needs of the students and community they serve. The study is designed to provide insight for future work within the district central to the research as well as other similar districts.

Connections with existing literature

Within the review of literature, several themes related to systemic continuous improvement are evident. These themes can be related directly to the concepts which are integral to the Concerns Based Adoption Model. As Ellsworth (2000) states, “CBAM recognizes that the effective change facilitator [must] understand how his or her clients (e.g., teachers) perceive change and adjust what he or she does accordingly” (p. 46). The data are analyzed using each of the stages (awareness, personal, management, consequence and collaboration) of this conceptual framework.

Awareness. According to Hall and Hord (1987), awareness is defined as the compilation of teachers’ cognizance of the changes taking place and their quest for information regarding the changes. In the data obtained through this research process, it can be ascertained that the educators involved were aware of the improvement activities that were occurring and understood the general purpose and implementation requirements of

each. Educators were able to represent their feelings about the strengths and weaknesses of specific activities and propose ways in which implementation could be improved. Equally apparent within the data is that an understanding of the necessity of some of the initiatives (particularly professional learning communities) was missing. As Sally stated, “If it ain’t broke, don’t fix it.” Thomas added to this sentiment by describing his respect for an older, more traditional teacher who had exemplary results, but his style was “the antithesis of what they say a master teacher would have today.”

The literature proposes that if teachers are satisfied and see no need for improvement, then commitment is minimal (Southerland et al., 2011). This perspective is corroborated throughout the surveys associated with this research project. A comparison with the HCCOG survey conducted this year, the Sanchez report of 2007 and the Keefe and Hatch study of 1999, suggests that little progress has been made in diminishing complacency within the county over a period of fifteen years. As Burke (2011) suggests, it is difficult to make a case for change especially when things are copacetic. The absence of this perception of need is worthy of note for leaders who wish to improve educational outlooks in rural, Appalachian districts. As Kotter (2007) and Crandall (1983) discuss, it is imperative for leaders to answer questions effectively about why the need for improvement exists if sustained commitment of staff is to be secured.

Personal. In the personal realm of CBAM, leaders examine individual concerns with how the specified change affects educators individually. The literature review describes the personal effects of change upon the individuals involved. Reeves (2009), Marzano (2009), and Lynch (2012) all describe the instability that is felt by those engaged in the process of continuous improvement. Burke (2011) and Vetrivel (2012) both describe the emotions

associated with the personal loss that occurs in instances of change. Educators interviewed as part of this study provide descriptions of emotions that are consistent with this literature.

Grace illustrates the manifestation of this phenomenon in Alleghany County as she states:

Change is worrisome because they [teachers] know this means more time, more effort, and is this just going to be one more change that really doesn't last very long before we're changing again. I think the perception of change with teachers is "Oh, here we go, it's one more thing" because a lot of times we're doing the same initiatives just with a different name. And I think. . . I think teachers get tired of that. They spend so much time on change that they don't feel like that they spend enough time with students doing the real actual teaching.

This personal struggle presents a key dilemma for educators within the system. Educators must choose between what they consider to be real, actual teaching and learning new strategies and techniques that may or may not have the desired impact on student performance.

In his interview, Herbert also describes teachers as being in a constant state of turmoil due to things continuously changing. The attention to these personal effects of engagement in improvement efforts is, as Jerald (2005) states, perhaps the most critical role for any building level administrator. Perhaps, this is the role most frequently overlooked by leaders who aspire to initiate improvement within a district, especially when the improvement is dictated by bodies outside of local control. As the interview transcripts and survey responses for this study show, the recent legislative mandates have created great personal strain and frustration for many of the educators in Alleghany County. Sally states, "Now is not a particularly good time to be looking at North Carolina." She recollects the history of North

Carolina as a leader in education, but expresses regret that it cannot currently be that model. Thomas and Rose both express frustration that mandates are taking the joy out of teaching and are having a detrimental impact on students. Prevailing attitudes of “Raleigh doesn’t care” are particularly significant in a district that has an existing perception that they are “forgotten” and are disenfranchised because of size or geographic location. The current educational climate within North Carolina is seen as further evidence of these prevailing beliefs. These personal perceptions can prove quite difficult for any educational leader to overcome.

Management. Management of improvement efforts within the district presented was one of the prevailing themes of data. At this level, administrators would be well advised to examine the degree to which teacher confidence in their ability to accomplish the change is impacting implementation. Research from Couros (2003) and Guskey (1985) has suggested that adequate resources, staff development, and professional autonomy would have been factors of frustration for the educators involved. However, multiple data points suggested that these particular needs were sufficiently met within Alleghany County in large part due to major grant funding that had been awarded. Securing the funding necessary for high quality training and the substitutes needed to make teacher participation possible can be particularly challenging for rural school districts (Harmon, Gordanier, Henry, & George, 2007). Recognition of this challenge and how it was overcome was voiced by several interviewees.

The desire to implement initiatives well and the need for time in order to do so was a recurring theme among those educators participating in the interviews. As Herbert stated, “Teachers don’t have enough time to get good at doing one thing well.” Grace adds to this in saying, “[We need] to implement a few at a time . . . to do those very well, before we go on

to something else.” Day, Elliot, and Kingston (2005) argue that attention to these details enables teachers to “maintain a sense of self, self-esteem, and a commitment to do the job as well as possible in all circumstances” (p. 572). For educational leaders engaging in continuous improvement activities, it is the attention to these details that can enhance opportunities for success.

Impact. Guskey (1985) and Reeves (2009) both assert that evidence of impact upon student learning can greatly enhance teacher commitment to any improvement effort, even those who are resistant at first. Couros (2003) also describes this as “observability” i.e., when teachers are able to observe a positive impact of their efforts, they are more likely to adopt the initiative and eventually institutionalize it into their practice. Throughout the interviews, educators clearly identified impact as a necessary component for effective reform. They were also able to articulate the benefits to student learning achieved through the improvement efforts implemented within the district.

Survey results and comments gleaned throughout interviews showed that educators perceived a positive impact of the improvement efforts upon their work; however, teachers demanded evidence of impact before committing to any endeavor. As Grace, Sally, and Rose all stated, one need only to show them how the endeavor would affect their students in a positive way and they would do whatever was required to make it work. Rose explained, “If it benefits my kids . . . then that’s where I want to be.” Sally concurs by asserting, “Just show me how it’s going to help my kids . . . that is all you have to do.” These words are worthy of attention by educational leaders and could be used as a guide for those who wish to improve instructional practices within the districts they serve.

Collaboration. In analysis of collaboration, differentiation between the literature and the data collected for this research begins to emerge. Hall and Hord (1987) describe collaboration within the professional realm as the individuals' concern about relating what they are doing with what is being done by others. They present evidence supporting professional collaboration as a critical part of the framework for developing the capacity of any given staff to ensure long-term sustainability for any particular effort. Connecting teachers with colleagues for instructional coaching, data analysis, and planning provide the foundation for research that supports professional learning communities as a valuable instructional tool.

A disconnect is evident between the perspectives of educators participating in this research and the literature. On the survey completed for this study, the majority of educators ranked social factors as having the greatest impact on improvement efforts. However, these same educators ranked professional learning communities as the least effective of the initiatives presented for evaluation. When asked to interpret these results, interviewees affirmed that social support from colleagues, family and the community at large was perhaps the greatest external factor affecting change within the county. They were also adamant that professional learning communities could be improved. Many of those interviewed felt that the PLC's were not well received. They believed that teachers were frustrated because the PLC was "just another meeting." Many voiced frustration that PLCs was a meeting with a pre-existing agenda, when what they needed as teachers was time just to work with their colleagues on issues and concerns that they defined. Sally stated that even though there was some benefit to the PLCs that she had attended, it was not the same as working with her

colleagues each day. She attributed the success to the meaningful and long-standing relationships she enjoyed with other educators within their building.

Social relationships are perceived to be critical to the educators involved in the research. Interview data suggest that the natural social relationships occurring within a close-knit community are most treasured by staff and most valued as a component of educational improvement. The educators express appreciation for opportunities to have meaningful input and feel as if their opinions are heard. They cite as a positive attribute the availability and familiarity of the central office staff not only to educators but also to parents and students as well. Educators describe strong community support and knowing who to contact to if anything is needed. They also report knowing that they will be supported if the need arises. The educators presented give examples of social collaboration that occurs naturally within the school and community setting. As Grace reports, “You don’t just stop being a teacher. You talk about things at the grocery store and at church.” Sally states that these social interactions are easy to develop and that they make collaboration comfortable. In follow up questions, she stated that the time she spent at the central office with other teachers working together as a team to design a pacing guide was perhaps one of the best activities she had engaged in and was desperately needed in order to improve instruction. She appreciated the fact that teachers were given the autonomy to design a document that was beneficial for them and was based upon the knowledge that they had of their curriculum areas and student needs. Other district grade level teams asserted similar sentiments and all believed that they had created a workable document of which to be proud.

While the existing research has preferred a more formal approach to professional collaboration through professional learning communities, Kelchtermans (2005) provided

credence to the viewpoints of the Alleghany County educators. Kelchtermans asserted that commitment to educational reform initiatives is affected directly by the social and cultural context in which they occur. He emphasized that the contextual factors such as sharing with colleagues, working with parents, and developing shared values can greatly enhance change endeavors. For educators within Alleghany County, there is a pronounced preference that opportunities for sharing with colleagues, parents and the community transpire in naturally-occurring, authentic ways rather than through mechanisms that appear to be contrived and unnatural.

Enhancing the Framework

Schmidt (2004) states that “the process of examining reforms is a complex and messy business and the use of multiple perspectives helps to capture aspects of this complexity” (p. 1). The data acquired throughout this research project suggests that a more integrated model of instructional reform is necessary in order to capture the full essence of systemic improvement within a rural district. Throughout the study four prevailing themes were identified by use of the principles of grounded theory. Based upon the data collected, there is evidence to suggest that management, collaboration, impact and culture are critical in the implementation of any continuous improvement activity initiated in this particular rural, Appalachian school district. An analysis of these findings within the framework of the Concerns Based Adoption Model show that the cultural element represented in the data collected is absent with the structure of the Concerns Based Adopted Model. This absence is significant in its importance to a complete representation of the perceptions of those characterized in this study. As such, this absence warrants a modification to the initial conceptual framework presented. More specifically, the framework of the Concerns Based

Adoption Model requires an additional feature in order to capture the symbiotic relationships between educational reform and the cultural context in which it takes place. This model can be reconceptualized as in Figure 4.

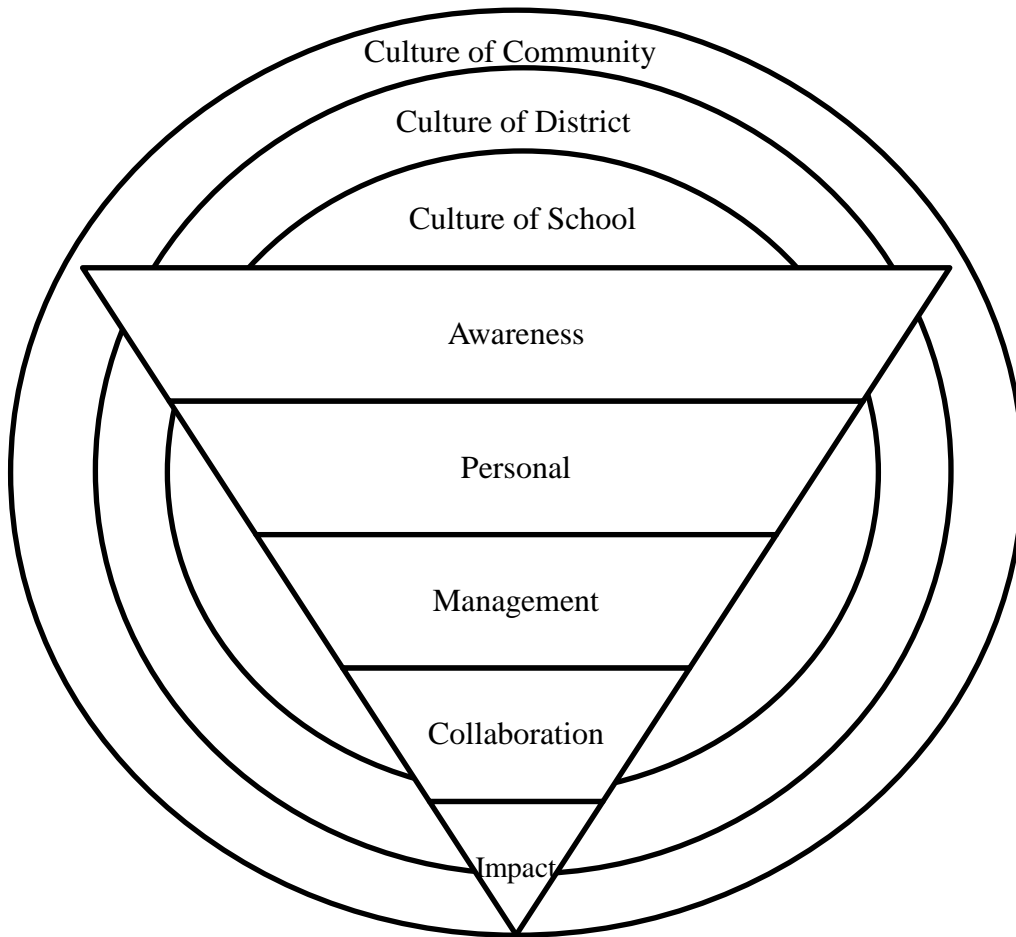


Figure 4. Modified Concerns Based Adoption Model

Based on the findings of this study, particular attention should be given to factors related to the culture of not only the schools, but also the district and community at large. The emerging themes of management, collaboration, impact and culture are supported by educational literature and for the district central to this study, the themes of management and

culture presented the strongest and most resounding calls for consideration. In order to capture the complete perspectives of those educators involved, the cultural element must be added to the Concerns Based Adoption Model in order to plan for successful systemic change. To ignore this element could increase frustration among stakeholders and limit opportunities for success.

In summarizing the dynamics influencing improvement activities within the district examined, Hattie states, “Part of it is culture and part of it is history.” Throughout the data presented, countless stories of the impact of school, district, and community culture can be found. Whether it be the impact of the community upon the school, attitudes of “it was good enough for me,” the divide between the haves and the have-nots, or the distrust of individuals who “aren’t from around here,” the impact of the local and school culture is evident. The lasting impact of reforms “gone wrong” or those that were not well received by the community at large is not quickly forgotten and influences prospects for new endeavors. Educators within Alleghany County made this point directly as they described lasting opinions about efforts to consolidate schools, adjust the school calendar, consolidate athletics, build roads, or construct dams. Many of these improvement efforts occurred several decades prior to this research project, but the sentiment associated with each has endured. Educational leaders who fail to acknowledge the institutional memory and culture of a district will find the path to reform difficult at best. Thus, the Concerns Based Adoption Model provides a meaningful structure for improvement at large, but adding a layer of cultural consideration improves its usefulness in analyzing areas that are unique due to cultural factors, such as geography, poverty, or history.

Cultural Conflict

Many contradictions exist in Alleghany County and became evident throughout the course of this project. There exist profound examples where the goals of the educational system are at cross purposes with the needs and desires of the community at large resulting in an atmosphere of cultural conflict. One can see three distinct areas of incongruence within efforts to transform education in Alleghany County. These areas include attitudes, actions, and resources.

Perhaps the most recognizable instance of school and community being at cross purposes exists in the perception within many rural communities that the school system is the perpetrator of the community's demise. Whether one believes that "brain drain," which is the outward migration of the best and brightest youth in a community toward college and higher paying careers, is indeed a reality, the mission of any educational system is perceived to undermine the efforts of the community to promote economic development (Carr & Kefalas, 2009). As instructional leaders continually strive to develop highly educated youth who are college and/or career ready, educators know that in all likelihood, they are grooming our students to leave our communities and many never return. In a recent Community Assistance Initiative meeting, community members stated their concerns that only the less educated graduates end up staying in our community. Whether one agrees with this argument or not, the perception plays itself out in the static demographics of Alleghany County.

The attitudes expressed in the community and within the board of education are in direct conflict with the goals of current initiatives. Leaders within the educational system routinely advocate for opportunities to develop county youth into the workforce of the future.

Leaders often argue the need for the skills that students will need to be competitive with China. Administrators stress the need to prepare students for a global workforce while a recent board member stated that he was not particularly interested in China but cared only about one particular community in the county. School leaders are promoting forward thinking and creativity while a majority of current board members are actively promoting the “it was good enough for me, so it’s good enough for my kid” mentality.

Actions of school leaders promote a perception of fostering “brain drain” as seen in the development of the Applied Technology Learning Center on the campus of Wilkes Community College. Again, Golden Leaf funding was used to provide the infrastructure and equipment to provide an on-site learning lab that will develop a labor force of electricians, machinists and computer programmers. While on the surface this may appear to be progress, Alleghany County simply does not have the capacity to provide gainful employment to more than a small percentage of the graduates. The labor market is currently at its capacity in the electrical, machinery and computer fields. The positions that exist are currently filled by recent graduates with no intention to retire soon. With little new home construction and few industrial opportunities in good years, the current economic downturn has significantly limited the possibilities for graduates of these programs to remain within our county borders. There is great discord between the goals of educational initiatives and the resources available in the county. Alleghany County simply does not have the economic catalysts needed to provide actual STEM jobs for its youngest citizens

While efforts to promote students ready for the careers that have yet to be invented are indeed honorable, the community simply does not have the capacity to provide that employment within the borders of the county. While actions promote the competitive skill

sets that employers state they need, the business community falls short in the hiring capacity which historically exists. There are distinct inconsistencies within attitudes which waver between the desire to give students “wings” and the need to keep them tied to the county. Educational leaders find that they are investing valuable resources in vocationalizing youth for a workforce that the community lacks the resources to sustain.

While none of these particular conflicts were within the scope of this research project, they present opportunities for dialogue between educational and community leaders. The presence of these conflicts presents opportunities for expanded research in the future and has distinct implications for leaders in rural areas.

Implications

The findings of this study contribute to the field of educational research surrounding educational reform, but more specifically research that focuses on rural education reform. This particular research study attempts to lessen the existing gaps in educational literature by providing insight into the experiences of educators who work in rural, isolated, and high-poverty districts. Although the research does not assess the impact of a specific program or technique, its value is that it gives voice to the educators who are directly engaged in and responsible for the success of any improvement effort. Based on the findings of this study, educators see that particular attention should be given to factors related to the culture of not only the schools, but also the community at large.

The emerging themes of management, collaboration, impact and culture are supported by educational literature, yet it is the cultural element that should be added to the Concerns Based Adoption Model if utilized for planning for systemic change. This study illuminates the importance of examining the cultural climate and institutional memories of any district

prior to beginning any improvement activity. Each interviewee was able to describe the nuances of culture within the county whether it be a cautious acceptance of those “not from around here” or as Hattie stated, “If you leave, don’t plan on a welcoming party when you return.” A low teacher turnover rate within the district is evidence of a stable teaching staff; but, it is also evidence of a long institutional memory. Each interviewee provided a concrete example of reform efforts that were not successful and explained them as a basis for hesitancy and resistance to change. Educators describe failed attempts to improve infrastructure, changes to school calendars and efforts to create a middle school within the district. After 40 years, the impact of these failed efforts and the trauma experienced by the community is still strongly embedded in the memories of those educators who experienced them.

Fullan, Hill, and Crevola (2006) assert that using this collective memory or understanding as a resource can be the single greatest difference between effective and ineffective organizations. Herold and Fedor (2008) stress that educational leaders who wish to challenge the status quo need to listen and learn from those individuals who have been in the system longer. The findings of this study suggest that occasions for open dialogue about experiences within the district as well as opportunities for more naturally occurring social interactions among educators can enhance rather than undermine the improvement pursued by the district.

Educational Leaders. The first implication of this study is for the leaders of Alleghany County Schools itself. As many of the interviewees stated, “You never quit changing.” The results of this study can serve as a reminder to the district leadership of the importance of considering the perspectives of the teachers involved in the actual work of

change. As principals and superintendents develop an understanding of the experiences lived by their staff members both in and out of the school setting, they will enhance their ability to effectively lead their educational institutions through improvement efforts. Fullan (2011) emphasizes that knowledge of the existing culture is critical for educational leaders. If a leader is too aggressive in pursuit of change, the culture of the district and the community at large will rebel. If the leader is overly respectful of the culture, he or she will become absorbed in that status quo and thereby make little impact. Leaders who embrace the context and perspectives of the life experiences of their staff can develop strategies to transform these experiences into factors that support success rather than barriers that build walls of resistance.

The findings of this study also serve as a guide to educational leaders in other school districts similar to Alleghany County Schools as they proceed to implement activities designed to enhance student achievement. The findings of this study provide information useful to leaders in other districts who are attempting to exact change in an environment where complacency or resistance exists but may not be overtly obvious to the leaders involved. Educational leaders must dig past surface explanations attributed to individual personalities and give thorough examination to the culture of the district and to the histories of those directly involved in the improvement efforts. Educational leaders must maintain focus on the benefits to students and clearly articulate these benefits to the educators involved.

While the findings of this study appear to be contrary to current research on professional learning communities, administrators would be well-advised to address the profound need for social experiences and collaborations that are authentic and naturally

occurring. The respect for authentic social interactions does not necessarily undermine the efforts of professional learning communities within the district, but could actually enhance the work that occurs within the formal setting. When teachers are given the opportunities to develop collegial bonds and are given opportunities to work together to solve common problems, they will be more productive in a setting that requires more structure.

Innovation fatigue was clearly voiced through both survey results and interviews conducted for this study. Thomas, Conchita, Herbert, Grace, Sally, and Erika all articulated concerns that too many things were changing at one time. They each expressed a desire that change would slow down and allow them the time they needed to effectively implement the improvement activities in place and focus on the work of educating students. Each expressed an understanding that some initiatives were beyond local control and voiced appreciation for district leaders who sheltered them from much of the additional work load imposed by state and national mandates. However, motivation was presented as a valid concern within the interviews. Interviewees expressed a desire to have time to collaborate in naturally occurring settings so they could design interventions that they believed to be effective. They expressed a desire to see the impact on students similar to theirs before proceeding with new improvement activities. Hargreaves and Fullan (2012) would concur with the opinions as they state:

People are motivated by good ideas tied to action; they are energized even more by pursuing action with others; they are spurred on still further by learning from their mistakes; and they are ultimately propelled by actions that make impact. (p.7)

As stated in the literature review completed as part of this study, educational leaders who wish to change the status quo will be observant of how the reform efforts are affecting their

staff and respond accordingly. Educational leaders who heed the advice of Jimerson (2005) and “keep a sharp eye on how the process is affecting staff and look for warning signs of obstacles that might threaten the effort” can diminish innovation fatigue while maintaining effective improvement activities.

Educational Staff. A second implication is for the staff of Allegheny County Schools. Educators within districts that exhibit low turnover and isolation can become complacent and resistant to efforts designed to enhance student performance. Without caution and diligence, exposure to new ideas and strategies can be non-existent. One would hope that this study would remind more tenured teachers to be open to the ideas of newer staff members and receptive to opportunities to explore new ideas on their own. Educators must be willing to seek out opportunities to voice their needs and concerns to the leadership of the district. Conversations about the individual and collective experiences of educators can provide a valuable context for decision-making. These same educators also bear a responsibility for using these opportunities for more naturally occurring collaboration in a productive and meaningful way.

Higher Education. The third and final implication is for educators responsible for designing Educational Leadership programs. While change is inherent to any position in educational leadership, frank and open discussion about ways to support improvement positively while being respectful of the culture of the educational community involved is not widespread. If potential leaders are to continue to improve student learning, there must be an understanding of how change occurs, with specific attention afforded to the cultural and historical influences that are prevalent in any endeavor. Leaders must learn to assess the culture and the institutional memory of a school district before determining a course of action

designed to change the status quo. Leaders must learn to identify the effects of factors such as low turnover rates and community climate. Without attention to these particular aspects, it will be difficult for leaders to develop the supportive strategies necessary for successful implementation. This will require a concerted effort to design valid instruments that can assess the nuances of any district where improvement is desired. This will require a concerted effort to design valid instruments that can assess the nuances of any district where improvement is desired. This also requires leadership training for the administrators most directly involved so that results are used as tools to enhance improvement rather than obstacles that maintain the status quo.

This study benefits the school district, staff, and community as leaders plan new improvement activities. The study applies to districts across the northwest region of North Carolina and within the Appalachian region itself as they strive to develop opportunities for new generations of students. The findings present in this study provide a framework for examination of the unique cultures and long institutional memories encountered by leaders of districts similar to Alleghany County. The study also provides a contribution to educational institutions responsible for preparing the educational leaders of the future.

Limitations

Researchers could agree that no research study is so complete in nature that no limitations exist (Creswell, 2003). The study presented within this dissertation is no exception to this tenet. While I attempted to be comprehensive in meeting the intended purpose of the study, some limitations are inherent. A summary of these limitations and their impact follows.

The study was intentionally focused on the 200 educators employed by Alleghany County Schools in North Carolina and narrowed further to the 173 individuals who had been employed for a minimum of five years. While 114 educators responded to the survey, only 11 individuals were interviewed to provide increased depth and breadth of understanding to the experiences of educators within the system. These interviews were completed over a relatively short period of time which did not allow for a long-term perspective of on-going change. A series of interviews with each participant across time would have allowed me to capture a more comprehensive view of their perspectives.

This study is affected by the time period in which it occurred. In the six months immediately prior to this study, the General Assembly of North Carolina enacted a series of legislative actions that changed the educational platform across the state in dramatic ways. The loss of teacher tenure, merit-based pay raises, lack of financial support for advanced degrees, vouchers for private education, and budget cuts to public education have had a dramatic impact on the morale and commitment of teachers across the state. While it is doubtful that other districts across the United States have experienced changes of this magnitude and significance in such a rapid manner, the findings of this study will be applicable to other settings undergoing a series of similar institutional stressors.

Any time the researcher is involved as an active participant, bias is a concern. I have worked with the teachers who were surveyed and interviewed. My children have been taught by many of the participants. The research study examines work that is of particular importance to me. Each of these relationships creates opportunities for researcher bias. Particular efforts were made to eliminate these concerns and well as those regarding any perceived authority of the researcher. While I made every attempt to control bias, there can

be no guarantee that my role within the school system did not affect the willingness of participants to provide completely honest responses.

In spite of the limitations presented, findings about cultural influences have the potential to be transferred to other leaders who seek to implement improvement efforts within their schools or districts. One can anticipate that the results of this particular study will extend to and guide others who wish to explore the unique nuances of the cultures in which they work upon the improvements they wish to achieve.

Future Research

This dissertation presents opportunities for further research that explore a variety of cultural influences both in rural Appalachia and other unique regions. A distinct possibility for further research would involve extending the scope of the study to districts that are similar to Alleghany County for a comparison of perspectives. Districts involved might include those presented within this project and could include Graham and Mitchell or other Tier I, high poverty districts in the Appalachian region of North Carolina. Research could be further expanded to include similar districts in any of the other twelve states that are included in the Appalachian designation by the Appalachian Regional Commission.

A study of teachers' perspectives regarding specific improvement initiatives may also be warranted. Perspectives of teachers regarding implementation of the Common Core, 1:1 Technology Initiatives such as Bring Your Own Device, Professional Learning Communities or Science, Technology, Engineering and Math Initiatives could prove useful for further study within the Appalachian Region. Research that concentrates on a specific theme presented within this study (i.e., time, leadership, social networking) might also provide a deeper knowledge base that could positively impact educational improvement efforts.

Research projects which examine the capabilities of school administrators to assess the cultural characteristics of their districts and programs which prepare administrators to purposely design activities that incorporate the knowledge gleaned from these assessments could also prove beneficial.

Future researchers could choose to engage in a similar study that encompasses a longer period of time and incorporates observations across the school setting. Garnering community perspectives in a deeper and more meaningful way than presented within this particular study could also prove beneficial. The broader perspective provided by research conducted over a longer time period, more embedded observation, or community dialogue would provide multiple opportunities for comparison or contrast with either this study or the previous studies of Keefe and Hatch that occurred in 1999.

This study was purposely conducted in a rural, Appalachian school district that experienced high-poverty. Researchers could consider the value of conducting a similar research study in other rural settings that are not part of the Appalachian region and/or high poverty. Additional research could encompass a comparison study with wealthier or more urban school settings and might provide valuable insight into systemic improvement efforts that are occurring in those educational settings.

Further opportunities for examination present themselves through dialogue regarding the social interactions within Alleghany County. A more detailed examination of the ways in which social relationships affect the implementation of improvement activities within the district is certainly warranted although it was not within the scope of this particular research endeavor. The effects of social relationships within the schools, between the schools and between the schools and the community at large can only provide depth in meaning to what

educators know about improvement activities in rural Appalachia. Additional research is also needed in order to examine the conflicts that exist between the community and the district that are presented within this body of research. Deeper dialogue is needed to examine community perceptions of the district fostering “brain drain” while preparing youth for jobs that do not currently exist in Alleghany County.

Finally, this particular study introduces the need to identify ways in which the cultural context of a district can be incorporated into the constructs of the Concerns Based Adoption Model. This study demonstrates a compelling need for researchers to provide a deeper contextualization of the dynamics of educational improvement in rural school systems.

Conclusion

The personal investment in continuous improvement efforts seen within a rural school district can be unique in terms of the culture and context of its setting. This study presented a thorough investigation of how the rural educators identified for participation have managed the improvement process. A detailed examination of both internal and external factors instrumental in change processes was conducted. Specific reactions of educators involved in the improvement efforts were identified and described. Participants identified factors that enhance improvement efforts as well as those that inhibit acceptance of new ideas. This study provided a comprehensive description of the experiences of those rural educators involved in the process of continuous systemic improvement.

The reader should be reminded of the intentional methodological choices that were made within this study before attempting to generalize the results found within. A case study by definition is specific in setting. While this affects the generalizability of the study, use of a case study allows an in-depth examination of the nuances within the district presented in a

manner that cannot otherwise be achieved. The mining for rich data has provided a detailed view and contextual understanding of the improvement activities within the district as a whole. The study does provide insights that could be transferred to the unique settings of other districts who are facing many of the same phenomena.

In giving voice to the educators most directly involved in systemic improvement activities, this study has also established the importance of examining the cultural climate of any district prior to beginning any improvement activity. Educational leaders can be successful at implementing systemic improvement activities if particular care is given to understanding the basis of attitudes related to change, rather than just accepting that participants are resistant. A thorough investigation of the “reform history” of the community and school system could provide valuable insight for leaders who wish to make a lasting impact. Using this knowledge, leaders can avoid pitfalls associated with reform efforts.

Epilogue

As an eighth grade student in West Virginia, I was required to take the Golden Horseshoe Test which tested knowledge of West Virginia history, geography, economy, government, and culture. Students who receive the highest test scores in each county then compete in an essay contest. Students who receive the highest combined score then are recognized as either a Knight or Lady of the Golden Horseshoe. This honor is based upon the 1716 expedition ordered by Governor Alexander Spotswood of Virginia into the region across the Blue Ridge Mountain Range into what is now West Virginia. This expedition into unknown lands was full of possibilities for the young colony of Virginia. However, Governor Spotswood knew that the trek across the mountains would be full of obstacles and could prove to test the determination of the party of men selected for this effort. In order to commemorate the bravery and commitment required of those who would embark upon this endeavor, Governor Spotswood presented each man with a Golden Horseshoe. Upon this Golden Horseshoe was the inscription *Sic jurat transcendere monte* or “Thus he swears to cross the mountains” (West Virginia Department of Education, 2014).

Although I took the Golden Horseshoe test and knew the story behind the tradition, the meaning of the Golden Horseshoe itself achieved greater significance one Friday afternoon in January of this year. I, along with several other educators from our district, was putting together stacks of assessment portfolios for a new Read to Achieve test required by the North Carolina General Assembly. The task was daunting, and everyone was growing tired. Teachers expressed increasing frustration with the changes taking place in North

Carolina, particularly those associated with the reading assessment requirements. At one point our conversation turned to my home state of West Virginia and the Golden Horseshoe test. I explained the test, the Knights and Ladies of the Golden Horseshoe, and the honor associated with the test. Throughout the dialogue, I became increasingly aware of the symbolism associated with the Golden Horseshoe. Individuals were frustrated, as teachers and as parents, with a test that could dishonor our students. Everyone was concerned that the task at hand could prove to be insurmountable, yet everybody shared a commitment to make the best of the situation. As one teacher later stated, “We swear we will cross this mountain [Read to Achieve Requirements] with our fists and our nails full of dirt.”

It was this rugged determination to conquer any obstacle that was required of those early pioneers crossing the mountains before them and exploring a new land. Regardless of the obstacles in the way, they swore that they would accomplish the task expected of them. While some may label this rugged determination or “mountain stubbornness” as resistance, it is typical of those living in the Appalachian Region. Once the course is set, there is no changing it. This “mountain stubbornness” also served Uncle Joe well. It allowed him to grow from a young run away into a skilled scientist who received congratulations “for his contributions toward the solution of biomedical and public sector problems” from the highest of government engineering agencies (Langley Researcher, 1971). It was this “mountain stubbornness” that caused Uncle Joe to honor his promise to a young child to find a missing shoe, regardless of how many times he had to cross the mountain. Educators who direct this same “mountain stubbornness” into educational improvement will create a culture of educational excellence for the youth of Alleghany County.

References

- Adams, D. (2007). Implementing and sustaining educational reforms: The case for little 'R'. *Prospects: Quarterly Review of Comparative Education*, 37(4), 385-401. doi: 10.1007/s11125-008-9042-5
- Alleghany County Chamber of Commerce. (2013) *History*. Retrieved from <http://www.sparta-nc.com/alleghanynorthcarolina.aspx>
- Alleghany County Government. (2013) *Map*. Retrieved from <http://www.alleghanycounty-nc.gov/>
- American Youth Policy Forum. (2010, April). *Challenges, assets, and innovations: Considerations for secondary education in rural communities* (Rural Education Brief). Washington, DC.
- Anderson, B. L. (1993). The stages of systemic change. *Educational Leadership*, 51(1), 14.
- Anderson, S. E. (1997). Understanding teacher change: Revisiting the Concerns Based Adoption Model. *Curriculum Inquiry*, 27, 331-367. doi: 10.1111/0362-6784.00057
- Appalachian Regional Commission. (2013). *The Appalachian Region*. Retrieved from http://www.arc.gov/appalachian_region/TheAppalachianRegion.asp
- Bana, Z. (2010). 'Great conversation' for school improvement in disadvantageous rural contexts: A participatory case study. *Educational Action Research*, 18(2), 213-237. doi: 10.1080/09650791003741111

- Bartlett, L., & Boyer, J. (2009) Participation Versus Mobilization: Cultural Styles of Political Action in an Appalachian County. In S. Keefe (Ed.), *Participatory Development in Appalachia* (pp. 115-139). Knoxville: University of Tennessee Press.
- Blalock, A. E. (2008). *Exploring leadership qualities among K-12 public school principals in North Carolina successfully implementing state-mandated technology initiatives: A dissertation*. (Unpublished Doctoral Dissertation). Appalachian State University, Boone, NC.
- Blue Ridge Christian School. (2013). *About us*. Retrieved from <http://www.blueridgechristianschool.org/#>
- Borman, K.M., & Timm, P. (2009). Connecting schools with urban Appalachian communities. In S. Keefe (Ed.), *Appalachia and community-making* (pp. 157-172). Chapel Hill: University of North Carolina Press.
- Buck Institute for Education. (2013). *BIE: Project based learning for the 21st century*. Retrieved from http://www.bie.org/about/the_bie_story/
- Budge, K. (2006). Rural leaders, rural places: Problem, privilege, and possibility. *Journal of Research in Rural Education*, 21(13), 1-10. Retrieved from <http://www.jrre.psu.edu/articles/21-13.pdf>
- Burke, W. W. (2011). *Organization change: Theory and practice*. Thousand Oaks, CA: Sage Publications.
- Calabrese, R. L. (2003). The ethical imperative to lead change: Overcoming the resistance to change. *International Journal of Educational Management*, 17(1), 7-13. doi: 10.1108/09513540310456347
- Can you solve this problem? (1972, September 3). *Langley Researcher*. p. 3.

- Carlson, R. V. (2000). *Case studies of rural schools implementing comprehensive school reform models*. (Austin, TX: Southwest Educational Development Laboratory). Retrieved from <http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED448990>
- Carr, P., & Kefalas, M. (2009). *Hollowing out the middle: The rural brain drain and what it means for America*. Boston: Beacon Press.
- Chesky, A. (2012). Creating community connections: Saving an historically agrarian town on the cusp of suburbanization. *Journal of Appalachian Studies*, 18(1/2), 220-233.
- Coladarci, T. (2007). Improving the yield of rural education research: An editor's swan song. *Journal of Research in Rural Education*, 22(3), 1-9. Retrieved from <http://jrre.psu.edu/articles/22-3.pdf>
- Conrad, I. (2006). *Education reform at the "edge of chaos": Constructing ETCH (an education theory complexity hybrid) for an optimal learning education environment* (Doctoral Dissertation). Retrieved from <http://d-scholarship.pitt.edu/10339/1/ConradDissertation10-4-06.pdf>
- Cook, S. R. (2009). The boundaries of participatory research: Lessons learned in the Monacan Nation. In S. Keefe (ed.), *Participatory development in Appalachia* (pp. 89-113). Knoxville: University of Tennessee Press.
- Couros, A. (2003). *Innovation, change theory and the acceptance of new technologies: A literature review*. (Unpublished literature review). Retrieved from http://www.educationaltechnology.ca/couros/publication_files/unpublishedpapers/change_theory.pdf

- Crandall, D. P. (1983). The teacher's role in school improvement. *Educational Leadership*, 41(3), 6.
- Creswell, J. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed). Thousand Oaks, CA: Sage.
- Crippen, K. J., Biesinger, K. D., & Ebert, E. K. (2010). Using professional development to achieve classroom reform and science proficiency: An urban success story from southern Nevada, USA. *Professional Development in Education*, 36(4), 637-661. doi: 10.1080/19415250903396026
- Davis, H. (2009). *Curriculum improvement: The teacher perspective on change in the classroom* (Doctoral Dissertation). The University of Montana, Missoula, Montana.
- Day, C., Elliot, B., & Kington, A. (2005). Reform, standards and teacher identity: Challenges of sustaining commitment. *Teaching & Teacher Education*, 21(5), 563-577. doi: 10.1016/j.tate.2005.03.001
- Denzin, N. K., & Lincoln, Y. S. (2000). *Handbook of qualitative research*. Thousand Oaks, Calif: Sage Publications.
- DeYoung, A. J. (1992). *At-risk children and the reform of rural schools: Economic and cultural dimensions*. Retrieved from <http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED361153>
- DeYoung, A., & Theobald, P. (1991). Community schools in the national context: The social and cultural impact of educational reform movements on American rural schools. *Journal of Research in rural Education*, 7(3), 3-14.

- Dobson, R., & Dobson, J. (1987). Toward a research agenda for rural education: Discovering the essence. *Research in Rural Education*, 4(2), 53-59.
- Retrieved from <http://www.jrre.psu.edu/articles/v4,n2,p53-59,Dobson.pdf>
- Elam, C. (2002) Culture, poverty and education in Appalachian Kentucky. *Education and Culture*, 18(1), 10-13.
- Ellsworth, J. B. (2000). *A Survey of Educational Change Models*. Retrieved from ERIC database. (ED443417).
- Elmore, R. (1998). Local school districts and instructional improvement. In W. Hawley (Ed.), *Keys to Effective Schools* (pp. 99-114). Washington, DC: National Education Association.
- Fraley, J. (2011). Missionaries to the wilderness: A history of land, identity, and moral geography in Appalachia. *Journal of Appalachian Studies*, 17(1/2), 28-41.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco: Jossey-Bass.
- Fullan, M. (2006, November). *Change theory: A force for school improvement*. Paper presented at the Center for Strategic Education, Victoria, Canada.
- Fullan, M. (2008). *The six secrets of change: What the best leaders do to help their organizations survive and thrive*. San Francisco: Jossey-Bass.
- Fullan, M. (2010). The role of the district in tri level reform. *International Encyclopedia of Education*, 6, 295-302.
- Fullan, M. (2011). *Change leader: Learning to do what matters most*. San Francisco: Jossey-Bass.

- Fullan, M., Cuttress, C., & Kilcher, A. (2009). 8 forces for leaders of change. In M. Fullan (Ed.), *The challenge of change: Start school improvement now!* (2nd ed., pp. 9-20). Thousand Oaks, CA, US: Corwin Press.
- Fullan, M., Hill, P., & Crevola, C. (2006). *Breakthrough*. Thousand Oaks, CA, US: Corwin Press.
- Gibson, D. (1999). *Mapping the dynamics of change: A complexity theory analysis of innovation in five Vermont high schools* (Doctoral Dissertation). The University of Vermont, Burlington, VT.
- Glass, P. (2010). Participatory development in Appalachia: Cultural identity, community, and sustainability. *Journal of Cultural Diversity*, 17, 154-156.
- Glesne, C. (2006). *Becoming qualitative researchers: An introduction* (3rd ed.). Boston: Pearson Education, Inc.
- Glesne, C. (2011). *Becoming qualitative researchers: An introduction* (4th ed.). Boston: Pearson Education, Inc.
- Goetz, J. P., & LeCompte, M. D. (1981). Ethnographic research and the problem of data reduction. *Anthropology and Education Quarterly*, 12, 51-70.
- Gruenewald, D. (2006). Resistance, reinhabitation, and regime change. *Journal of Research in Rural Education*, 21(9), 1-7. Retrieved from <http://jrre.psu.edu/articles/21-9.pdf>
- Gurevich, L. I. (2011). On the reform of higher education and science in Kazakhstan. *Russian Education & Society*, 53(9), 63-70.
- Guskey, T. R. (1985a). Staff development and teacher change. *Educational Leadership*, 42(7), 57.

- Guskey, T. R. (1985b). The effects of staff development on teachers' perceptions about effective teaching. *Journal of Educational Research*, 78(6), 378-381.
- Hall, G. E., & Hord, S. M. (1987). *Change in schools: Facilitating the process*. Albany, NY: State University of New York Press.
- Hall, G. E., & Hord, S. M. (2011). *Implementing change: Patterns, principles, and potholes*. Boston: Pearson.
- Hargreaves, A. (2009). A decade of educational change and a defining moment of opportunity—an introduction. *Journal of Educational Change* 10: 89-100. doi: 10.1007/s10833-009-9103-4
- Hargreaves, A., & Fullan, M. (2012). *Professional capital*. New York, NY: Teachers College Press.
- Harmon, H. L., Gordanier, J., Henry, L., & George, A. (2007). Changing teaching practices in rural schools. *The Rural Educator*, 8(Winter 2007-9), 8-12. Retrieved from http://www.ruraleducator.net/archive/28-2/28-2_Harmon.pdf
- Harmon, H. L., & Schafft, K. (2009). Rural school leadership for collaborative community development. *Rural Educator*, 30(3), 4-9.
- Harris, A. (2011). Reforming systems: Realizing the fourth way. *Journal of Educational Change*, 12(2), 159-171.
- Harrison, B. (2012, April). *The view of the future through the Pre K - 12 lens*. Paper presented at the 2012 Gathering for Alumni, Students, Faculty and Friends, Forsyth Technical Community College, Winston-Salem, NC.
- Hatch, E. (2008). Modernity with a mountain inflection. *Journal of Appalachian Studies*, 14, 145-159.

- Heenan, B., St. John, M., Broun, S., Howard, M., & Becerra, A. (2001). *Setting the foundation for reform: The work of the rural systemic initiatives*. Inverness, CA: Inverness Research Associates. 207.
- Horsley, D., & Loucks-Horsley, S. (1998) CBAM brings order to the tornado of change. *Journal of Staff Development*, 19(4), 17-20.
- Houston, S. (2012, April). *Defining STEM education for scale*. Paper presented at the Scaling STEM: Transforming Education Matters, Durham, NC.
- Howley, A., & Howley, C.B. (1999). The transformative challenge of rural context. *Educational Foundations*, 14(4), 73-85.
- Howley, C., Theobald, P., & Howley, A. (2005). What rural education research is most worth? A reply to Arnold, Newman, Gaddy, and Dean. *Journal of Research in Rural Education*, 20(18), 1-6.
- Howley, C.B. (1997). How to make rural education research rural: An essay at practical advice. *Journal of Research in Rural Education*, 13(2), 131-138.
- Jennings, N. (1999). Reform in small places: Examining two rural schools' implementation of state reform. *Journal of Research in Rural Education*, 15(3), 127-140.
- Jerald, C. (2005). *More than maintenance: Sustaining improvement efforts over the long run*. [Policy Brief] Washington, D.C: Center for Comprehensive School Reform and Improvement. Retrieved from ERIC database. (ED494068).
- Jimerson, L. (2005). Placism in NCLB—How rural children are left behind. *Equity & Excellence in Education*, 38(3), 211-219. doi: 10.1080/10665680591002588

- Johnson, C. C. (2007). Technical, political and cultural barriers to science education reform. *International Journal of Leadership in Education*, 10(2), 171-190. doi: 10.1080/13603120601097470
- Johnson, P. E., & Crispeels, J. H. (2010). Linking the central office and its schools for reform. *Educational Administration Quarterly*, 46(5), 738-775. doi: 10.1177/0013161x10377346
- Johnson, J. H., & Karsada, J. D. (2011). *Six disruptive demographic trends: What Census 2010 will reveal*. Retrieved from http://www.kenan-flagler.unc.edu/~media/Files/kenaninstitute/UNC_KenanInstitute_2010Census.pdf
- Kannapel, P. J. (2000). *Standards-based reform and rural school improvement: Similarities, differences, prospects for the future*. Educational Resources Information Center, Charleston, WV: AEL.
- Keefe, S. E. (2008). Theorizing modernity in Appalachia. *Journal of Appalachian Studies* 14: 160-173.
- Keefe, S. E. (2009). *Participatory development in Appalachia: Cultural identity, community, and sustainability*. Knoxville, TN: University of Tennessee Press.
- Keefe, S. E., & Hatch, E. (2000). Attitudes toward social and economic change in Alleghany County: Results of the 1999 Alleghany County opinion survey. Retrieved from <http://books.google.com/books?id=NVQSGwAACAAJ>
- Kelchtermans, G. (2005). Teachers' emotions in educational reforms: Self-understanding, vulnerable commitment and micropolitical literacy. *Teaching and Teacher Education*, 21(8), 995-1006. doi: 10.1016/j.tate.2005.06.009

- Ketchum, M. (2013, January 9). AHS honored with statewide award. *The Alleghany News*, A1-2.
- Ketchum, M. (2013, May 29). Alleghany High School scholarships awarded. *The Alleghany News*, 7A.
- Khopoli, B., & O'Toole, J. (2012). The concerns based adoption model: Teachers participation in action research. *Systemic Practice and Action Research*, 25(2), 137-148. doi: 10.1007/s11213-011-9214-8
- Klein, S., Medrich, E. A., & Perez-Ferreiro, V. (1996). *Studies of education reform: Education reform that works*. Washington, DC: U.S. Dept. of Education, Office of Educational Research and Improvement, Office of Reform Assistance and Dissemination.
- Kotter, J. P. (2007, January). Leading change: Why transformation efforts fail. *Harvard Business Review*, 60-67. Retrieved from http://cerc.stanford.edu/leading_change.pdf
- Kushman, J. W., & Barnhardt, R. (1999). *Study of Alaska rural systemic reform: Final Report*. Retrieved from <http://www.eric.ed.gov/PDFS/ED437251.pdf>
- Kushman, J. W., & Yap, K. (1999). What makes the difference in school improvement? An impact study of Onward to Excellence in Mississippi schools. *Journal of Education for Students Placed at Risk*, 4(3), 277-298. doi: 10.1207/s15327671espr0403_7
- Lamkin, M. L. (2006). Challenges and changes faced by rural superintendents. *Rural Educator*, 28(1), 17-24.
- Larue, C. (2012, March 21). Alleghany Memorial requests \$600,000 a year from county. *The Alleghany News*. pp. A1.

- Lemke, L., & Sabelli, H. (2008). Complex systems and educational change: Towards a new research agenda. *Educational Philosophy and Theory*, 40, 118–129. doi: 10.1111/j.1469-5812.2007.00401.x
- Little, J. W., & Bartlett, L. (2002). Career and commitment in the context of comprehensive school reform. *Teachers & Teaching*, 8(3/4), 345-354. doi: 10.1080/135406002100000486
- Lynch, M. (2012). *It's time for a change: School Reform for the next decade*. Plymouth, UK: Rowman & Littlefield Education.
- Marshall, C., & Rossman, G. (2006). Chapter 2: The what of the study. In Marshall and Rossman, *Designing qualitative research* (pp. 23-50). Thousand Oaks, CA: Sage.
- Marzano, R. J., & Waters, T. (2009). *District leadership that works: Striking the right balance*. Bloomington, IN: Solution Tree Press.
- Mason, M. (2008). What is complexity theory and what are its implications for educational change? *Educational Philosophy & Theory*, 40(1), 35-49. doi: 10.1111/j.1469-5812.2007.00413.x
- Masumoto, M., & Brown-Welty, S. (2009). Case study of the leadership practices and school-community interrelationships in high performing, high-poverty, rural California high schools. *Journal of Research in Rural Education*, 24(9), 2-18. Retrieved from <http://jrre.psu.edu/articles/24-1.pdf>
- Maxwell, J. A. (2005). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage Publications.

- McGinn, N. (2002, April). *Why we should end reforms in education*. Paper presented at the Education Network, Third Meeting, Secondary Education, Inter-American Development Bank, Washington, DC. Retrieved from [http://www.iabd.org/int/DRP/ing/Red4? Documents?McGinnAbril4-5-\(2002\)ing.pdf](http://www.iabd.org/int/DRP/ing/Red4?Documents?McGinnAbril4-5-(2002)ing.pdf)
- Milford, T. M., Jagger, S., Yore, L. D., & Anderson, J. O. (2010). National influences on science education reform in Canada. *Canadian Journal of Science, Mathematics & Technology Education*, 10(4), 370-381. doi: 10.1080/14926156.2010.528827
- National Commission of Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*. Washington, DC: U.S. Government Printing Office.
- New Schools Project. (2013). *Workforce development*. North Carolina New Schools. Retrieved from <http://ncnewschools.org/strategy/workforce-development>
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425 (2002).
- North Carolina Commission on Workforce Development. (2011). *State of the North Carolina workforce 2011-2020*. Retrieved from [http://www.nccommerce.com/ Portals/11/Documents/ Reports/2011%20SOTW%20Full%20 Final%20Report%2052311%20909am.pdf](http://www.nccommerce.com/Portals/11/Documents/Reports/2011%20SOTW%20Full%20Final%20Report%2052311%20909am.pdf)
- North Carolina Department of Agriculture. (2013). *County data*. Retrieved from <http://www.ncagr.gov/states/codata/alleglhany.pdf>
- North Carolina Department of Public Instruction. (2012). *Charter school membership by local education agency*. Retrieved from [http://www.ncpublicschools.org/docs/ charterschools/membershipregion11-12.pdf](http://www.ncpublicschools.org/docs/charterschools/membershipregion11-12.pdf)

- North Carolina Department of Public Instruction. (2013a). *Annual report on reasons teachers leave the profession*. Retrieved from <http://www.ncpublicschools.org/educatoreffectiveness/surveys/turnover/>
- North Carolina Department of Public Instruction. (2013b). *NC Public Schools report card*. Retrieved from <http://www.ncreportcards.org/src/search.jsp?pYear=2011-2012&pList=1&pListVal=030%3AAlleghany+County+Schools>
- North Carolina Rural Economic Development Center. (2013). *Rural data bank: County profiles*. Retrieved from http://www.ncruralcenter.org/index.php?option=com_wrapper&view=wrapper&Itemid=1
- North Carolina State Center for Health Statistics. (2011). *Mortality statistics summary*. Retrieved from <http://www.schs.state.nc.us/schs/deaths/lcd/2011/suicide.html>
- Osborne, M. (2007). Without a vision, the people perish. *Journal of Appalachian Studies*, 13(1/2), 7-25.
- Peine, E. K., & Schafft, K. A. (2012). Moonshine, mountaineers, and modernity: Distilling cultural history in the southern Appalachian mountains. *Journal of Appalachian Studies* 18, 93-112.
- Queitzsch, M., & Hahn, K. (1995). *Great expectations: Preparing rural teachers for educational reform*. Retrieved from <http://www.eric.ed.gov/PDFS/ED391781.pdf>
- Reeves, D. (2009). *Leading change in your school: How to conquer myths, build commitment and get results*. Alexandria, VA: Association for Supervision and Curriculum Development.

- Rizzo, J. (2012, April). *The future of education in NC*. Paper presented at the Symposium of the Appalachian State University Spring 2012 Gathering For Alumni, Students, Faculty and Friends, Forsyth Technical Community College, Winston-Salem, NC.
- Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). New York: Free Press.
- Royal, T. J. (2011, December 21). Forensic audit must precede SBI probe of New River, commissioners told. *The Alleghany News*. pp. A1.
- Ryder, J., & Banner, I. (2011). Multiple aims in the development of a major reform of the national curriculum for science in England. *International Journal of Science Education*, 33(5), 709-725. doi: 10.1080/09500693.2010.485282
- Rural School Community Trust. (2012). *County data*. Retrieved from <http://www.ruraledu.org/articles.php?category=160>.
- Salinas, T. M. (2004). Reflections on rural research. *Parent and Student Perspectives on Mathematics Education in Four Rural East Tennessee Communities* (pp. 1-2). Knoxville: University of Tennessee.
- Sandelowski, M. (2000) Combining Qualitative and Quantitative Sampling, Data Collection, and Analysis Techniques in Mixed-Method Studies. *Research in Nursing & Health*, 23, 246–255.
- Sarafidou, J.-O., & Nikolaidis, D. I. (2009). School leadership and teachers' attitudes towards school change: The case of high schools in Greece. *International Journal of Learning*, 16(8), 431-440.

- Schechter, C. (2011). Toward communal negotiation of meaning in schools: Principals' perceptions of collective learning from success. *Teachers College Record, 113*(11), 2415-2459. Retrieved from <http://www.tcrecord.org>
- Schmidt, M., & White, R. (2004). Educational change: Putting reform into perspective. *Journal of Educational Change, 5*, 207-211.
- Schneider, N. (2013). *The case study* [PowerPoint slides]. Retrieved from <http://docstudent-researchdesign.pbworks.com/w/file/51375451/The%20Case%20Study.pptx>
- Schofield, J. (2001, May 14). Saving our schools. *Macleans, 1*-8.
- Schram, T. (2006). *Conceptualizing and proposing qualitative research*. Columbus, OH: Pearson.
- Seal, K. R., & Harmon, H. L.(1995). Realities of rural school reform. *Phi Delta Kappan, 77*(2), 119.
- Seashore, K. (2009). Leadership and change in schools: Personal reflections over the last 30 years. *Journal of Educational Change, 10*, 129-140. doi: 10.1007/s10833-009-9111-4
- Seltzer, D., & Himley, O. (1995). A model for professional development and school improvement in rural schools. *Journal of Research in Rural Education, 11* (1), 36-44.
- Shank, G. D. (2002). *Qualitative research: A personal skills approach*. Upper Saddle River, NJ: Prentice Hall.

- Sherman, J., & Sage, R. (2011). Sending off all your good treasures: Rural schools, brain-drain, and community survival in the wake of economic collapse. *Journal of Research in Rural Education*, 26(11), 1-14. Retrieved from <http://jrre.psu.edu/articles/26-11.pdf>
- Sherwood, T. (2001). *Where has all the "rural" gone? Rural education research and current federal reform*. Retrieved from ERIC database. (ED467121).
- Skinner, Q., & Price, R. (Eds.). (1988). *Machiavelli: The prince*. Cambridge: Cambridge University Press.
- Southerland, S. A., Sowell, S., Blanchard, M., & Granger, E. M. (2011). Exploring the construct of pedagogical discontentment: A tool to understand science teachers' openness to reform. *Research in Science Education*, 41(3), 299-317. doi: 10.1007/s11165-010-9166-5
- Stewart, K. (1996). *A space on the side of the road: Cultural poetics in an "other" America*. Princeton: Princeton University Press.
- Stoll, L. (2006). The future of educational change: System thinkers in action: Response to Michael Fullan. *Journal of Educational Change*, 7,123-127. doi: 10.1007/s10833-006-0004-5.
- Tabler, D. (2012, August 22). *The lost provinces*. Retrieved from <http://www.appalachianhistory.net/2012/08/lost-provinces.html>
- Taylor, S. J., & Bogdan, R. (1994). *An introduction to qualitative research: The search for meanings* (2 ed.). New York: Wiley.

- Tytler, R. (2010). Stories of reform in science education: Commentary on opp(reg)ressive policies and tempered radicals. *Cultural Studies of Science Education*, 5(4), 967-976. doi: 10.1007/s11422-010-9277-3
- Theobald, P. (1991). Country lifers reconsidered: Educational reform for rural America. *Journal of Research in Rural Education*, 5(2), 21-28.
- Theobald, P., & Alsmeyer, A. (1995). Cultural obstacles on the road to rural educational renewal. *Education and Culture*, 12(2), 1-6.
- U.S. Census Bureau, (2010). *Quickfacts: Alleghany County, NC*. Retrieved from <http://quickfacts.census.gov/qfd/states/37/37005.html>
- U.S. Department of Agriculture. (2003). *ERS: Rural-urban continuum codes*. Retrieved from <http://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx>
- U.S. Department of Agriculture. (2013). *Quickstats*. Retrieved from http://quickstats.nass.usda.gov/?long_desc_LIKE=
- U.S. Department of Education. (2003). *No Child Left Behind: Proven methods*. Retrieved from <http://www.ed.gov/nclb/methods/index.html>
- U.S. Department of Education. (2009). *Supplemental educational services brochure*. Retrieved from <http://www2.ed.gov/parents/academic/involve/suppservices/index.html> Supplemental Educational Services Brochure
- Vetrivel, S. C. (2010). Educational leaders: A paradigm change masters. *Advances in Management*, 3(11), 21-24.
- Waks, Leonard J. (2007). The concept of fundamental educational change. *Educational Theory* 57: 277-295. doi: 10.1111/j.1741-5446.2007.00257.x

West Virginia Department of Education. (2013). *Golden Horseshoe Test*. Retrieved from
<http://wvde.state.wv.us/goldenhorseshoe/>

Williams, J. M., & Nierengarten, G. (2011). Recommendations from the North Star State:
Rural administrators speak out. *Rural Educator*, 33(1), 15-24.

Appendix 1
Comparative Demographics

Indicator	Alleghany	5 County Avg.	Tier I Avg	State Avg
% Pass Rate	74%	73%	61%	66%
Graduation Rate	86%	85%	79%	81%
Poverty Rate	23%	21%	22%	19%
Child Poverty Rate	34%	31%	33%	28%
Unemployment	12%	14%	13%	11%
Median Age	45.9	44	41	41
Avg. Household Income	\$32,210	\$34,430	\$35,088	\$40,069

Note. Data were extrapolated to compute an average of the five counties in the western of North Carolina that are identified as being rural and from the Mountain geographic region. An average of all Tier I counties within the state of North Carolina was also computed along with the average for the state of North Carolina. (North Carolina Rural Data Bank, February 5, 2013).

Appendix 2

Three Counties Demographic Comparison

County	Population	Population Density	Median Age	Median Household Income	Poverty Rate	Child Poverty Rate
Alleghany	11,115	47	45.9	\$32,210	23%	34%
Graham	8,861	30	44.3	\$31,863	23%	34%
Mitchell	1,5576	70	45.7	\$35,032	19%	28%

Note. Data were extrapolated to compute an average of the three counties in the western of North Carolina that are identified as being rural and from the Mountain geographic region. Of the five counties holding a rural designation and being from the Mountain geographic region, the three counties presented all hold the same designation of nine on the urban continuum code utilized by the data bank. The remaining two counties hold a designation of eight meaning that they are less rural than the three presented. (North Carolina Rural Data Bank, February 5, 2013).

Appendix 3*Three County Academic Comparisons*

Indicator	Alleghany	Graham	Mitchell	State
EOG				
Proficiency				
Mathematics	76.9%	76.7%	75.4%	71.2%
Reading	88.0%	86.1%	88.3%	88.0%
EOC				
Proficiency				
English 1	85.8%	86.2%	86.0%	82.9%
Algebra 1	81.4%	76.7%	77.8%	78.7%
Biology	94.0%	81.2%	87.6%	83.0%
Cohort	86.0%	94%	83%	81.0%
Graduation Rate				

Note. Of the five counties holding a rural designation and being from the Mountain geographic region, the three counties presented all hold the same designation of nine on the urban continuum code utilized by the data bank. The remaining two counties hold a designation of eight meaning that they are less rural than the three presented. (North Carolina Department of Public Instruction District Report Cards, February 5, 2013).

Appendix 4

Student Services Program Director Central Office Administrator Job Description

Please note: This job description has not been adopted by the State Board of Education. It is a general description created using information obtained from program competencies outlined for Institutions of Higher Education program evaluation. Local school systems can and often do modify the job descriptions to meet their individual needs. Please contact the school system in which you are interested for a finalized job description.

POSITION: Student Services Program Director

REPORTS TO: Superintendent or Designee

SUPERVISES: Support Personnel

PURPOSE: The Director, Student Services Programs, provides the leadership to the local educational agency programs for student services programs. The role includes the ability to motivate, influence, and shape individuals in order to assure continuous organizational development and improvement. Indicators of competency fall in the areas of leadership, planning and improving curriculum and instruction, policy and procedures, community relations, and fiscal management.

The Director, Student Services Programs, is part of the local leadership team and works under the general supervision of the superintendent or designee. The director maintains a cooperative relationship with the principals, other school personnel, other related service agencies and parents. The overall responsibility of the director is to administer the student services program with local, state, and federal guidelines, rules, regulations, and laws.

The following functions are included within the general job description for DIRECTOR as developed by the Department of Public Instruction and adopted by the State Board of Education and are included here only as a general framework for this type of position.

MAJOR FUNCTIONS:

PROGRAM MANAGEMENT

The Director provides effective leadership in developing comprehensive program plans and implementing and evaluating the planned programs.

FISCAL MANAGEMENT

The Director assists/prepares budgets, coordinates with other department or agencies to assure maximum services, and maintains records/reports/inventories in accordance with local/state/federal policies.

INFORMATION MANAGEMENT

The Director shares information about programs with various publics, serves as a liaison between the school system and other agencies and assists in the development of in-service staff development. The Director accomplishes personal growth objectives and demonstrates professional ethics.

Appendix 5

Perceptions of District Continuous Improvement Efforts - Survey

Q1.1 My name is Princa Cox and I am a doctoral candidate in the Educational Leadership Program of Appalachian State University. I am conducting a study that will examine Perspectives of Educators Engaged in Continuous Improvement Efforts within Rural Appalachian School Settings. You are invited to participate in a research study that I am conducting for the completion of the dissertation requirement for Appalachian State University.

The purpose of this research study is to explore and describe how educators (teachers, assistants, and administrators) experience efforts at continuous systemic improvement implemented within their district. The goals specific to this study are designed to give voice to the educators who have experienced a series of initiatives designed to improve educational outcomes within Alleghany County Schools. Educator perceptions about the improvement efforts within the district are important to capture as a critical element in sustained improvement. This understanding is important for school districts like Alleghany County as they attempt to improve student achievement.

I am requesting your participation in this study through the completion of an online survey. The survey software will generate a unique identifier that will allow me to select participants for follow-up interviews. All information obtained in this study is strictly confidential. Participant identities will be kept confidential and will only be used by me to identify possible interview candidates. Once candidates for the interview process are identified, all identifying information will be removed. Disseminated data will be summarized across responses in order to ensure confidentiality of participants.

Data collected from this survey will be stored in an electronic survey system that is password protected. Participation in this survey is voluntary. You are free to withdraw your consent to participate and may discontinue participation at any time without consequence. If you choose to withdraw, it will not affect you in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state. The survey will take approximately 5 minutes to complete.

Thank you in advance for your assistance with this project.

Q1.2 By clicking I AGREE and continuing on with this survey you are agreeing that you have read the above information, or that it has been read to you and you fully understand the contents of this document and are openly willing to consent to take part in this study. All of your questions concerning this study have been answered. By clicking I AGREE, you are agreeing that you are at least 18 years of age or older and would like to continue the survey.

Q2.1 What is your gender?

- Male (1)
- Female (2)

Q2.2 Which category below includes your age?

- 21-29 (1)
- 30-39 (2)
- 40-49 (3)
- 50-59 (4)
- 60 or older (5)

Q2.3 Please indicate your education and certification information. (Select all that apply)

- Not degreed (1)
- Bachelor's degree (2)
- Master's degree in progress (3)
- Master's degree completed (indicate area below) (4) _____
- National Board Certified Teacher (5)
- Ed.S (6)
- Ed.D/Ph.D (7)

Q2.4 Which of the following best describes your current position?

- Classroom Teacher (1)
- Special Area Teacher/Support Position (2)
- Teacher Assistant (3)
- Administrator (4)

Q3.1 What are your reasons for accepting a position in Alleghany County?

- I grew up here (1)
- Family member works here (2)
- Family members live in the area (3)
- Desire to work in a rural school system (4)
- Reputation of the school district (5)
- Other (6) _____

Q3.2 Which of the following improvement efforts have you engaged in? Check all that apply.

- Reading (1)
- Science, Technology, Engineering and Math (STEM) (2)
- Model Classrooms (3)
- Dropout Prevention (4)
- Leadership and Assistance for Science Education Reform (LASER) Institute (5)
- Professional Learning Communities (6)
- Instructional Technology Master's Program (7)
- Other (8) _____

Q3.2a How effectively have the following improvement efforts been implemented:

Effective (1) Needs Improvement (2) Ineffective (3) I was not engaged in this effort. (4)

- Reading (1)
- STEM (2)
- Model Classrooms (3)
- Dropout Prevention (16)
- LASER Institute (17)
- Professional Learning Communities (18)
- Instructional Technology Master's Program (19)
- Other (20)

Q3.3 Rank these factors from greatest (1st) to least (6th) in regards to their impact upon district improvement efforts. (Please click-hold, drag and drop)

- _____ Time requirements: instruction time, planning time, extra duty time, etc. (1)
- _____ Facilities and resources: building, grounds, materials, technology, etc. (2)
- _____ Leadership: administrative support, guidance, professionalism, etc. (3)
- _____ Teacher empowerment: school- based leadership, involvement in decision -making, etc. (4)
- _____ Professional development: staff training opportunities, educational advancements, etc. (5)
- _____ Other (6)

Q3.4 Rank these factors from greatest (1st) to least (4th) in regards to their impact upon district improvement efforts. (Please click-hold, drag and drop)

- _____ Community perceptions: support, excitement, buy-in (1)
- _____ Political support: Board of Education, County Commission, State, and Federal (2)
- _____ Social support among colleagues (3)
- _____ Other (4)

Answer If Rank these factors from greatest (1st) to least (6th) in ... Time requirements:
instruction time, planning time, extra duty time, etc. Is Less Than or Equal to 2

Q4.1 Please indicate the number that best describes to what extent you disagree or agree with the statement.

- Strongly Disagree (1) Disagree (2) Agree (3) Strongly Agree (4)
- District improvement activities take too much time (1)
 - District improvement activities have been a waste of time (2)
 - I am concerned about conflict between improvement activities and my job responsibilities (3)
 - I am concerned about conflict between my interests and my responsibilities outside of school (4)
 - I am concerned about having enough time to manage all of the improvement activities (5)

Answer If Rank these factors from greatest (1st) to least (6th) in ... Facilities and resources:
building, grounds, materials, technology, etc. Is Less Than or Equal to 2

Q5.1 Please indicate the number that best describes to what extent you disagree or agree with the statement.

- Strongly Disagree (1) Disagree (2) Agree (3) Strongly Agree (4)
- District improvement activities have been a waste of money (1)
 - My district has made adequate resources available for implementing improvement efforts (2)
 - Resources devoted to school improvement activities could have been better distributed (3)
 - We do not have enough resources to implement district improvement efforts (4)

Answer If Rank these factors from greatest (1st) to least (6th) in ... Leadership:
administrative support, guidance, professionalism, etc. Is Less Than or Equal to 2

Q6.1 Please indicate the number that best describes to what extent you disagree or agree with the statement.

- Strongly Disagree (1) Disagree (2) Agree (3) Strongly Agree (4)
- Administrators acknowledge and celebrate the achievements and accomplishments of others in efforts to ensure student success (1)
 - Administrators encourage innovation to improve teaching and successful learning for every student (2)
 - Administrators listen to my concerns regarding improvement activities (3)
 - I feel that my district puts too much emphasis on improvement activities (4)
 - Ideas and views offered by others to resolve problems and improve learning are supported (5)

Answer If Rank these factors from greatest (1st) to least (6th) in ... Teacher empowerment: school- based leadership, involvement in decision -making, etc. Is Less Than or Equal to 2

Q7.1 Please indicate the number that best describes to what extent you disagree or agree with the statement.

Strongly Disagree (1) Disagree (2) Agree (3) Strongly Agree (4)

I feel pressured to participate in district improvement efforts (1)

My professional autonomy is restricted by district improvement efforts (2)

Improvement activities have helped me to become a better teacher (3)

District improvement efforts are consistent with my view of what my role as a teacher should be (4)

District improvement efforts make teaching more enjoyable (5)

I contribute ideas and opinions toward improving student success (6)

Answer If Rank these factors from greatest (1st) to least (6th) in ... Professional development: staff training opportunities, educational advancements, etc. Is Less Than or Equal to 2

Q8.1 Please indicate the number that best describes to what extent you disagree or agree with the statement.

Strongly Disagree (1) Disagree (2) Agree (3) Strongly Agree (4) Does not apply to me (5)

I have received adequate training/professional development to help implement district improvement efforts in the areas in which I have been engaged. (1)

I now know of some approaches to teaching that might work better (2)

I have been able to advance my own education through district improvement efforts (3)

District leaders have provided professional development in areas that are important to me (4)

Answer If Rank these factors from greatest (1st) to least (4th) in ... Community perceptions: support, excitement, buy-in Is Less Than or Equal to 2

Q9.1 Please indicate the number that best describes to what extent you disagree or agree with the statement.

Strongly Disagree (1) Disagree (2) Agree (3) Strongly Agree (4)

I feel supported by my community in implementing improvement activities (1)

Improvement activities were received positively by members of the community (2)

Improvement efforts are well received by parents (3)

Improvement activities have helped our community (4)

I am concerned about conflict between improvement activities and community perceptions (5)

Answer If Rank these factors from greatest (1st) to least (4th) in ... Political support: Board of Education, County Commission, State, and Federal Is Less Than or Equal to 2

Q10.1 Please indicate the number that best describes to what extent you disagree or agree with the statement.

Strongly Disagree (1) Disagree (2) Agree (3) Strongly Agree (4)

Our community leaders support our efforts to improve education (1)

District improvement efforts are implemented in response to federal mandates (2)

District improvement efforts are implemented in response to state mandates (3)

District improvement efforts are implemented in response to expectations of our county commissioners (4)

District improvement efforts are implemented in response to expectations of our school board (5)

Answer If Rank these factors from greatest (1st) to least (4th) in ... Social support among colleagues Is Less Than or Equal to 2

Q11.1 Please indicate the number that best describes to what extent you disagree or agree with the statement.

Strongly Disagree (1) Disagree (2) Agree (3) Strongly Agree (4)

I feel supported by my family in implementing improvement activities (1)

I generate enthusiasm and persuade others to work together to accomplish common goals for the success of students (2)

I feel supported by my colleagues in implementing improvement activities (3)

I would like to help other teachers in their implementation of improvement activities (4)

My colleagues generate enthusiasm and persuade others to work together to accomplish common goals for the success of students (5)

Q12.1 Please indicate the number that best describes to what extent you disagree or agree with the statement.

Strongly Disagree (1) Disagree (2) Agree (3) Strongly Agree(4)

Improvement efforts are connected to a larger goal and purpose (1)

Improvement efforts make it more enjoyable to come to work (2)

Improvement efforts have a positive impact upon my work (3)

I would like to know how the improvement efforts will make us any better than we are now (4)

Too many things are changing in our school district (5)

Improvement activities are too difficult to implement (6)

Q22 Please describe those factors that have significantly affected school improvement efforts in a positive way.

Q23 Please describe barriers that have significantly hindered school improvement efforts within the district.

Q24 Please provide any additional comments regarding the questions presented within this survey or district improvement efforts as a whole.

Q13.1 Thank you! Your responses will remain secure and confidential. If you have any questions regarding this study, please contact me by telephone at (336) 657--0323 or by email. You may contact the faculty advisors of this project, Dr. Kathleen Lynch--Davis or Dr. Tracie Salinas or by telephone at (828) 262--7247 or (828) 262--2376 respectively. If you have questions about your rights as someone taking part in research, contact the Appalachian Institutional Review Board Administrator at (828) -262--2130 (days), through email or at Appalachian State University, Office of Research and Sponsored Programs, IRB Administrator, Boone, NC 28608. You may print this form for your records if you choose.

Appendix 6

Consent Form

I agree to participate as an interviewee in this research project, which concerns *Perspectives of Educators Engaged in Continuous Improvement Efforts within a Rural Appalachian School Setting*. The purpose of this study is to advance the understanding of the efforts to enhance instruction in Alleghany County Schools. The research will explore the factors that have enhanced continuous improvement efforts as well as the barriers that continue to exist. This investigation will include the thoughts and perspectives of educators about the improvement initiatives underway in Alleghany County Schools. This understanding is important for school districts like Alleghany County as they attempt to improve student achievement.

I understand that my comments will be audio recorded and transcribed for use in dissertation research to be conducted by Princa Cox, a doctoral student at Appalachian State University. The interview(s) will take place in a minimum of one setting that will last approximately 45 minutes in length. Follow up interviews may be scheduled.

I understand that there are no costs for participation in this study. I understand that there are no foreseeable risks associated with my participation. I understand I will receive no compensation for the interview. While there may be no personal benefit for my participation in this study, I understand that I will be contributing to a deeper understanding of improvement efforts that occur across our nation and within the nuances characteristic of rural Appalachian school settings.

I understand that Princa Cox will make every effort to protect the confidentiality of all participants. Fictitious names will be used throughout the project. Results will only be used for educational purposes. Identifying information will not be shared with other employees or administrators within my school or district. I understand that I may experience slight anxiety when asked to respond to a particular survey or interview question, however, I may choose not to answer any question that makes me feel uncomfortable.

I give Princa Cox ownership of the tapes and transcripts from the interview(s) she conducts with me and understand that tapes and transcripts will be kept in the researcher's possession off of school premises and will be stored in a locked cabinet separate from identifying information. I understand that information or quotations from transcripts of the interview may be published following my review and approval.

I understand that the interview is voluntary and I can end it at any time without consequence. I also understand that if I have questions about this research project, I can call Dr. Kathleen Lynch Davis or Dr. Tracie Salinas at (828) 262-7247 or (828) 262-2376 respectively. I can also contact Appalachian State University's Office of Research Protections at (828) 262-7981 or irb@appstate.edu.

Name of Interviewer (printed)

Name of Interviewee (printed)

Signature of Interviewer

Signature of Interviewee

Date(s) of Interview (s)

Appendix 7
Survey Results Summary

Participant Demographics

Position	Survey		Interview Candidates	
	<u>Respondents</u> (n=109)	<u>Percentage</u>	<u>Candidates</u> (n=11)	<u>Percentage</u>
Teacher	53	48.6%	5	45.5%
Support Staff	30	27.5%	3	27.3%
Teacher Assistants	14	12.8%	2	9.1%
Administrators	12	11.0%	2	18.1%

Age	Survey		Interview Candidates	
	<u>Respondents</u> (n=110)	<u>Percentage</u>	<u>Candidates</u> (n=11)	<u>Percentage</u>
20-29	11	10%	1	9.1%
30-39	22	20%	2	18.1%
40-49	44	40%	5	45.5%
50-59	30	27%	3	27.3%
60 or older	3	2.73%	0	0%

Rank these factors from greatest (1st) to least (6th) in regards to their impact upon district improvement efforts. (n=98); 6th= “Other”

Answer	1	2	3	4	5	6	Mean
Time requirements: instruction time, planning time, extra duty time, etc.	40	19	12	9	17	1	2.46
Facilities and resources: building, grounds, materials, technology, etc.	11	20	9	17	38	3	3.61
Leadership: administrative support, guidance, professionalism, etc.	20	22	34	17	5	0	2.64
Teacher empowerment: school- based leadership, involvement in decision -making, etc.	14	22	23	29	10	0	2.99
Professional development: staff training opportunities, educational advancements, etc.	12	14	20	24	26	2	3.45

Table 1. Time (*n*=57)

Please indicate the number that best describes to what extent you disagree or agree with the statement.

Question	Strongly Disagree	Disagree	Agree	Strongly Agree	Average Value
District improvement activities take too much time	4	22	20	11	2.67
District improvement activities have been a waste of time	8	29	15	5	2.30
I am concerned about conflict between improvement activities and my job responsibilities	6	17	14	19	2.86
I am concerned about conflict between my interests and my responsibilities outside of school	6	21	22	7	2.58
I am concerned about having enough time to manage all of the improvement activities	-	10	12	19	3.72

Table 2. Facilities and Resources (*n*=29)

Question	Strongly Disagree	Disagree	Agree	Strongly Agree	Average Value
District improvement activities have been a waste of money	1	18	10	-	2.31
My district has made adequate resources available for implementing improvement efforts	-	2	16	11	3.31
Resources devoted to school improvement activities could have been better distributed	-	15	10	4	2.62
We do not have enough resources to implement district improvement efforts	2	14	7	5	2.54

Table 3. Leadership (n=36)

Question	Strongly Disagree	Disagree	Agree	Strongly Agree	Average Value
Administrators acknowledge and celebrate the achievements and accomplishments of others in efforts to ensure student success	1	2	14	19	3.58
Administrators encourage innovation to improve teaching and successful learning for every student	1	-	10	22	3.85
Administrators listen to my concerns regarding improvement activities	1	3	12	17	3.65
I feel that my district puts too much emphasis on improvement activities	8	21	6	5	2.27
Ideas and views offered by others to resolve problems and improve learning are supported	-	3	18	14	3.53

Table 4. Teacher Empowerment (n=33)

Question	Strongly Disagree	Disagree	Agree	Strongly Agree	Average Value
I feel pressured to participate in district improvement efforts	3	15	7	8	2.68
My professional autonomy is restricted by district improvement efforts	4	18	5	6	2.47
Improvement activities have helped me to become a better teacher	2	3	12	14	3.38
District improvement efforts are consistent with my view of what my role as a teacher should be	-	7	15	10	3.21
District improvement efforts make teaching more enjoyable	1	8	18	5	2.97
I contribute ideas and opinions toward improving student success	-	-	12	18	3.76

Table 5. Professional Development (n=24)

Question	Strongly Disagree	Disagree	Agree	Strongly Agree	Average Value
I have received adequate training/professional development to help implement district improvement efforts in the areas in which I have been engaged.	-	7	7	10	3.27
I now know of some approaches to teaching that might work better	-	5	6	13	3.46
District leaders have provided professional development in areas that are important to me	1	6	7	8	3.31

Rank these factors from greatest (1st) to least (4th) in regards to their impact upon district improvement efforts. (n=98); 4th = “Other”

Answer	1	2	3	4	Mean
Community perceptions: support, excitement, buy-in	13	36	44	0	2.33
Political support: Board of Education, County Commission, State, and Federal	34	38	19	2	1.88
Social support among colleagues	44	19	30	0	1.85

Table 6. Community (n=46)

Question	Strongly Disagree	Disagree	Agree	Strongly Agree	Average Value
I feel supported by my community in implementing improvement activities	-	4	26	17	3.28
Improvement activities were received positively by members of the community	-	4	27	15	3.24
Improvement efforts are well received by parents	-	6	28	13	3.15
Improvement activities have helped our community	-	2	22	21	3.49
I am concerned about conflict between improvement activities and community perceptions	-	18	20	7	2.80

Table 7. Social Support (n=52)

Question	Strongly Disagree	Disagree	Agree	Strongly Agree	Average Value
I feel supported by my family in implementing improvement activities	-	3	25	24	3.62
I generate enthusiasm and persuade others to work together to accomplish goals for the success of students	-	2	21	28	3.73
I feel supported by my colleagues in improvement activities	-	4	21	29	3.59
I would like to help other teachers in their implementation of improvement activities	-	2	26	23	3.60
My colleagues generate enthusiasm to work together to accomplish goals for the success of students	-	8	21	24	3.45

Table 8. Political Support (n=67)

Question	Strongly Disagree	Disagree	Agree	Strongly Agree	Average Value
Our community leaders support our efforts to improve education	-	4	34	27	3.40
District improvement efforts are implemented in response to federal mandates	-	7	27	28	3.46
District improvement efforts are implemented in response to state mandates	-	6	25	31	3.52
District improvement efforts are implemented in response to expectations of our county commissioners	-	20	34	10	2.91
District improvement efforts are implemented in response to expectations of our school board	-	7	34	24	3.31

Appendix 8

Educator Perceptions of District Continuous Improvement Efforts

Draft Guiding Questions for Interviews

Specific interview questions will evolve as survey results are analyzed for prevailing themes, however the following guiding questions will be shape the research that is to occur:

1. What are the educators' views about the continuous systemic improvement efforts implemented by the school district?
2. What are educator perspectives of the Internal factors (Leadership, time, resources, professional development, etc.) influencing the improvement efforts of the school district?
3. What are educator perspectives of the External factors (political, community, social, etc.) influencing the improvement efforts of the school district?
4. In what ways does collaboration and relationships with colleagues affect improvement efforts?
5. How do community and cultural factors affect participants in the improvement process?
6. In what ways do educators perceive their experiences with continuous improvement activities as different from continuous improvement in more urban districts?
7. In what ways do educators believe that Appalachian culture affects their efforts as educators within their school

Appendix 9

Listing of Salient Codes

1. Collaboration
2. Professional learning communities
3. Cultural differences
4. Cultural advantages
5. Cultural disadvantages
6. Description of the community
7. Description of the school system
8. Educator role
9. Examples of changes
10. External factors
11. Internal factors
12. Community influences
13. Cultural Influences
14. Relationships
15. Instruction
16. Politics
17. Size
18. Unwritten rules

Vita

Princa Elizabeth Boggess Cox is a native of Greenbrier County, WV. She was the first in her family to graduate high school and the first to attend college. She attended Shepherd College in Shepherdstown, WV and earned a Bachelor's degree in Elementary Education, graduating in 1989. Upon graduation, she entered her teaching career in the Jefferson County, WV school district. While teaching at Charles Town Junior High she completed a Master's Degree in School Counseling from West Virginia University. In May of 1995, she graduated with her Master's and moved to Sparta, NC.

While living in North Carolina, she has been employed as a school counselor for both Wilkes and Alleghany County School districts. She has completed requirements for the Licensed Professional Counselor and National Board Certified Counselor credentials. She also was designated as a Nationally Certified Teacher through the National Board for Professional Teaching Standards. She completed additional coursework for a Post-Master's Certificate at the University of North Carolina – Greensboro, Add-on licensure in School Administration through Western Carolina University and Add-on licensure for Exceptional Children's Directors also through UNC-Greensboro. In the fall of 2009, she enrolled in the Ed. S. Program in Educational Leadership at Appalachian State University. Upon completion of the degree in August of 2011, she immediately enrolled in the Doctoral Program for Educational Leadership at the same institution. She completed her degree in the spring of 2014.